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Digital sections and digital line system – Metallic access networks

Handshake procedures for digital subscriber line transceivers

Recommendation ITU-T G.994.1

ITU-T G-SERIES RECOMMENDATIONS

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For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T G.994.1

Handshake procedures for digital subscriber line transceivers

Summary

Recommendation ITU-T G.994.1 provides a flexible mechanism for digital subscriber line (DSL) transceivers to exchange capabilities and to select a common mode of operation. It includes parameters relating to service and application requirements02/ as well as parameters pertinent to various DSL transceivers. This Recommendation is currently an integral part of the start-up procedure for Recommendations ITU-T G.991.2, ITU-T G.992.1, ITU-T G.992.2, ITU-T G.992.3, ITU-T G.992.4, ITU-T G.992.5, ITU-T G.993.1, ITU-T G.993.2, ITU-T G.993.5, ITU-T G.9701 and ITU-T G.9711. It is anticipated that future DSL Recommendations will also be able to make use of this Recommendation. Provisions are also included for exchanging non-standard information.The 2021 version of this Recommendation fully integrates Amendment 1 to Recommendation ITU-T G.994.1 (2018) and includes the following new technical material:

– A new annex with a collision control protocol for point-to-multipoint operation

– Modify the mandatory carrier set for ITU-T G.9701 Annex X with operation over coax

– A new annex M with managed objects in a new format compatible with a YANG model

– Add codepoints for the support of Recommendation ITU-T G.9711.

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FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had received notice of intellectual property, protected by patents/software copyrights, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate ITU-T databases available via the ITU-T website at http://www.itu.int/ITU-T/ipr/.

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Recommendation ITU-T G.994.1

Handshake procedures for digital subscriber line transceivers

1 Scope

This Recommendation defines signals, messages and procedures for exchanging these between digital subscriber line (DSL) equipment, when the modes of operation of the equipment need to be automatically established and selected, but before signals are exchanged which are specific to a particular DSL Recommendation.

For interrelationships of this Recommendation with other ITU-T G.99x-series Recommendations, see Recommendation ITU-T G.995.1 (informative).

The principal characteristics of this Recommendation are as follows:

a) use over metallic local loops;

b) provisions to exchange capabilities information between DSL equipment to identify common modes of operation;

c) provisions for DSL equipment at either end of the loop to select a common mode of operation or to request the other end to select the mode;

d) provisions for exchanging non-standard information between DSL equipment;

e) provisions to exchange and request service and application-related information;

f) support for both duplex and half-duplex transmission modes;

g) support for multi-pair operation;

h) provisions for DSL equipment at the remote end of the loop (xTU-R) to propose a common mode of operation (new in version 2 of the Recommendation through the use of new message type MP and its associated transactions);

i) support for a re-transmission mechanism (new in version 3 of the Recommendation through the use of new message type REQ-RTX).

j) support for exchanging the relative transmit and receive level of individual carriers in order to estimate loop characteristics.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T G.991.2] Recommendation ITU-T G.991.2 (2003), *Single-pair high-speed digital subscriber line (SHDSL) transceivers*.

[ITU-T G.992.1] Recommendation ITU-T G.992.1 (1999), *Asymmetric digital subscriber line (ADSL) transceivers*.

[ITU-T G.992.2] Recommendation ITU-T G.992.2 (1999), *Splitterless asymmetric digital subscriber line (ADSL) transceivers*.

[ITU-T G.992.3] Recommendation ITU-T G.992.3 (2005), *Asymmetric digital subscriber line transceivers 2 (ADSL2)*.

[ITU-T G.992.4] Recommendation ITU-T G.992.4 (2002), *Splitterless asymmetric digital subscriber line transceivers 2 (splitterless ADSL2)*.

[ITU-T G.992.5] Recommendation ITU-T G.992.5 (2005), *Asymmetric digital subscriber line (ADSL) transceivers – Extended bandwidth ADSL2 (ADSL2plus)*.

[ITU-T G.993.1] Recommendation ITU-T G.993.1 (2004), *Very high speed digital subscriber line transceivers (VDSL)*.

[ITU-T G.993.2] Recommendation ITU-T G.993.2 (2019), *Very high speed digital subscriber line transceivers 2 (VDSL2)*.

[ITU-T G.997.1] Recommendation ITU-T G.997.1 (2019), *Physical layer management for digital subscriber line transceivers*.

[ITU-T G.9701] Recommendation ITU-T G.9701 (2019), *Fast access to subscriber terminals (G.fast) - Physical layer specification*.

[ITU-T T.35] Recommendation ITU-T T.35 (1991), *Procedure for the allocation of ITU-T defined codes for non-standard facilities*.

[ISO/IEC 13239] ISO/IEC 13239:2002, *Information Technology – Telecommunications and information exchange between systems – High-level data link control (HDLC) procedures*.

3 Definitions

This Recommendation defines the following terms:

3.1 capabilities: The "enabled" (= supported) set of functions, not necessarily the complete set of functions implemented in the unit.

3.2 carrier set: A set of one or more frequencies associated with the PSD mask of a particular xDSL Recommendation.

3.3 downstream: The direction of transmission from the xTU-C to the xTU-R.

3.4 errored frame: A frame that contains a frame check sequence (FCS) error.

3.5 Galf: An octet of value 81_{16}, i.e., the ones complement of an HDLC flag.

3.6 initiating signal: A signal that initiates the start-up procedure of an ITU-T G.994.1 session.

3.7 initiating station: The station that initiates the start-up procedure of an ITU-T G.994.1 session.

3.8 invalid frame: A frame that has fewer than four octets between flags, excluding transparency octets.

3.9 message: Framed information conveyed via modulated transmission.

3.10 responding signal: A signal that is sent in response to an initiating signal.

3.11 responding station: The station that responds to the initiation of the start-up procedure of an ITU-T G.994.1 session.

3.12 session: An ITU-T G.994.1 session comprises a start-up procedure, one or more transactions and a cleardown procedure (except as noted in clause 12).

3.13 shaping: Application of different gain scaling (B_i, see clauses 6.1.1 and 6.2) and therefore different transmit power to individual carriers within a carrier set.

3.14 signalling family: A group of carrier sets which are integral multiples of a given carrier spacing frequency.

3.15 **subcarrier**: Refer to the associated xDSL Recommendation for the definition of this term.

3.16 **transaction**: A sequence of ITU-T G.994.1 messages, ending with either a positive acknowledgement (ACK(1) (except as noted in clause 7.6)), a negative acknowledgement (NAK) or a time-out (see clause 12).

3.17 **upstream**: The direction of transmission from the xTU-R to the xTU-C.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ACK Acknowledgement message

ADSL Asymmetric Digital Subscriber Line

CL Capabilities List

CLR Capabilities List Request

FCS Frame Check Sequence

HSTU Handshake Transceiver Unit

LSB Least Significant Bit

MP Mode Proposal message

MR Mode Request message

MS Mode Select message

MSB Most Significant Bit

NAK Negative Acknowledgement Message

PSTN Public Switched Telephone Network

REQ Request message type message

xDSL Any of the various types of Digital Subscriber Lines

xTU-C xDSL Transceiver Unit – Central office end

xTU-R xDSL Transceiver Unit – Remote terminal end

5 System reference diagram

Figure 1 illustrates the system reference model for this Recommendation.

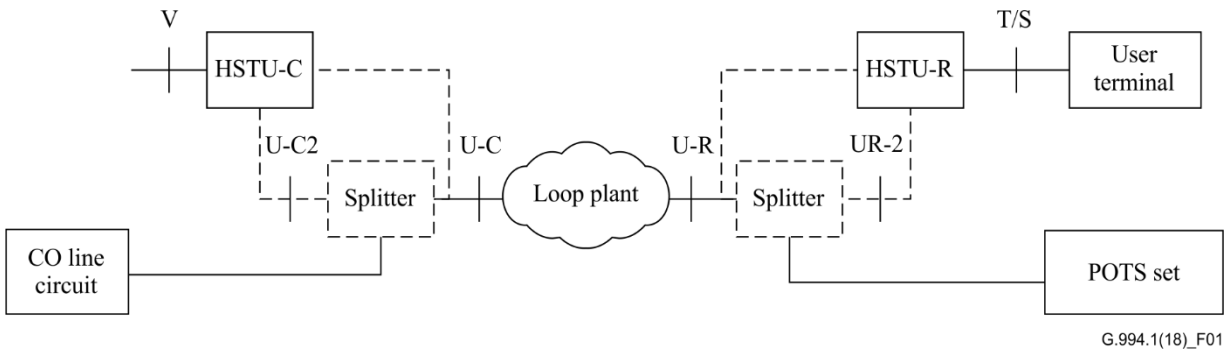


Figure 1 – System reference model

The system reference model identifies the necessary functional blocks and the reference points and/or interface points that may be used or have implications in this Recommendation.

The system reference model comprises the following blocks:

- transceivers: HSTU-C and HSTU-R;
- splitter function;
- loop plant;
- user terminal;
- POTS set;
- CO line circuit.

This Recommendation defines the signals, messages and procedures for common mode selection, and as such only relates to the functions associated with the HSTU-C and HSTU-R blocks. HSTU is used to signify that the signals, messages and procedures defined in this Recommendation are different from the ITU-T G.99x Recommendations that use this Recommendation as a common start-up procedure. The remaining blocks are included to illustrate a reference system.

Splitters may or may not be present at the central and remote sites and are therefore signified by dotted boxes. If splitters are present, the HSTU-C (HSTU-R) may be connected to either or to both the U-C (U-R) and U-C2 (U-R2) interface points, signified by the dotted connecting lines.

The reference points V, U, T/S may not need to be exposed. This system reference model does not imply any particular implementation of the signals, messages and procedures defined in this Recommendation.

The HSTU negotiates modes of operation on behalf of one or more xDSL terminal unit(s) that are hereafter referred to as xTU.

6 Signals and modulation

6.1 Description of signals

The signalling families used in this Recommendation, and the carrier sets defined within each family, are described in this clause.

Each xDSL mode of operation has a mandatory carrier set associated with it. For each xDSL mode of operation implemented by an ITU-T G.994.1 station, the initial ITU-T G.994.1 transmission from the station shall include the associated mandatory carrier set for that mode.

NOTE 1 – In the interest of explicitly indicating the presence of HSTU-x that might not have common modes, the initial transmission should use as many carriers as possible, and HSTU-x are encouraged to detect all carriers from all signalling families.

Both duplex and half-duplex transmission modes are defined for use within this Recommendation. The transmission mode supported is a function of carrier set and is specified in Tables 1 and 3.

In some jurisdictions it may be necessary to shape the power of the downstream and upstream carriers in order to be compliant with PSD masks enforced by regulation. Implementations shall shape the power of the carriers, or disabled carriers as appropriate, to meet in-force regulations or codes of conduct in the jurisdiction where they are deployed.

Frequencies other than those specified in Tables 1, 3, and D.2 (if Annex D is supported) shall not be transmitted simultaneously with ITU-T G.994.1 signals.

The tolerance of the symbol rate and carrier frequencies for an HSTU-C shall be ±50 ppm. The tolerance of the symbol rate and carrier frequencies for an HSTU-R shall be ±200 ppm during R-TONES-REQ and ±50 ppm during and after R-TONE1 (in duplex transmission mode) or

R-FLAG1 (in half-duplex transmission mode). The HSTU-R may perform partial or full loop timing acquisition during the silence period preceding R-TONE1 or R-FLAG1. For both the HSTU-C and HSTU-R transmitter, the symbol rate and carrier frequencies shall be time locked.

NOTE 2 – National regulations may limit signal transmission to those carriers that fall within the PSD mask of the xDSL mode(s) supported by the station.

NOTE 3 – It is advised to monitor for existing services prior to transmitting signals to avoid interfering with them.

NOTE 4 – New xDSL services that wish to use this Recommendation are strongly encouraged to use currently defined carrier sets rather than defining new carrier sets.

6.1.1 4.3125 kHz signalling family

Carrier frequencies within this signalling family are given by N × 4.3125 kHz, where N is a positive integer. The symbol rate shall be 4312.5/8 ≡ 539.0625 symbols per second.

Within this family, there are twelve upstream carrier sets, designated A43, A43c, B43, B43c, C43, J43, V43, V43P, V43I, V43-S, V43P-S and V43I-S. Each upstream carrier set has an associated downstream carrier set that carries the same designation. The carrier set frequencies and the maximum transmit power level per carrier for each carrier set are defined in Table 1, where frequency = N × 4.3125 kHz.

The carrier sets in this family are mandatory for the xDSL modes listed in Table 2. One or more carriers listed in Tables 1 or 3 may be transmitted in addition to the mandatory carrier set listed in Table 2. Carriers not listed in Tables 1 or 3 shall not be transmitted, except those specified in Table D.2 if Annex D is supported.

Those additional carrier sets within this signalling family are specified in Annex D for the support of the collision control protocol for point to multi-point (P2MP) operation.

In some jurisdictions it may be necessary to shape the power of the downstream carriers in order to be compliant with PSD masks enforced by regulation. However, if shaping is applied, the transmit powers of individual downstream carriers within the carrier set shall be explicitly indicated in the identification field using the "relative power level for downstream carrier with frequency index N" parameter for each transmitted carrier (see Spar(1) bits defined in Tables 9.0.3 to 9.0.5, and their underlying NPar(2) bits starting at Table 9.51). Shaping of upstream carriers within a carrier set is not supported and shall not be applied.

If, in addition to the mandatory carrier set, one or more carriers are transmitted, the transmit power of these additional carriers should also be indicated. This applies to both upstream and downstream.

When all downstream carriers within a carrier set are transmitted at the same power level, the transmit power should be indicated in the identification field using the "relative power level/carrier for downstream carrier set" parameter for that carrier set (see Spar(1) bits defined in Tables 9.0.1 to 9.0.3, and their underlying NPar(2) bits starting at Table 9.15). The transmit power for the upstream carrier sets should also be indicated.

NOTE – Modem receivers complying with older versions of this Recommendation expect all the downstream carriers in a carrier set to be transmitted at the same power level. The use of shaping may not be compatible with this equipment (see Table 8).

The "relative power level for downstream carrier with frequency index N" parameter is also used to indicate the relative receive level of carrier N. For a downstream carrier, this parameter indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. For an upstream carrier, it indicates the transmit level for an HSTU-R and the receive level for an HSTU-C.

Table 1 – Carrier sets for the 4.3125 kHz signalling family

Carrier set designation	Upstream carrier sets		Downstream carrier sets		Transmission mode
	Frequency indices (N)	Maximum power level/carrier (dBm)	Frequency indices (N)	Maximum power level/carrier (dBm)	
A43 (Notes 1, 3	9; 17; 25	–1.65	40; 56; 64	–3.65	Duplex only
A43c (Notes 1, 3)	9; 17; 25	–1.65	257; 293; 337	–3.65	Duplex only
B43	37; 45; 53	–1.65	72; 88; 96	–3.65	Duplex only
B43c (Note 1)	37; 45; 53	–1.65	257; 293; 337	–3.65	Duplex only
C43	7; 9	–1.65	12; 14; 64	–3.65	Duplex only
J43	9; 17; 25	–1.65	72; 88; 96	–3.65	Duplex only
V43 (Notes 1, 2)	944; 972; 999	–16.65	257; 383; 511	–3.65	Duplex only
V43P (Note 1)	9; 17; 25	–1.65	257; 383; 511	–3.65	Duplex only
V43I (Note 1)	37; 45; 53	–1.65	257; 383; 511	–3.65	Duplex only
V43-S (Notes 1, 2)	944; 999	–16.65	257; 383	–3.65	Duplex only
V43P-S (Note 1)	17; 25	–1.65	257; 383	–3.65	Duplex only
V43I-S (Note 1)	45; 53	–1.65	257; 383	–3.65	Duplex only
F43 (Note 4)	4176; 4224; 4272	–28.65	4368; 4440; 4488	–28.65	Duplex only
F43c (Note 5)	1968; 2784	–38.65	4368; 4440	–28.65	Duplex only

NOTE 1 – In some jurisdictions, it may be necessary to limit the maximum downstream power level, for example −23.65 dBm/carrier where the PSD is limited to −60 dBm/Hz.

NOTE 2 – It is expected that sufficient power back-off is applied to the upstream carriers of short lines to avoid excessive crosstalk into adjacent pairs during ITU-T G.994.1.

NOTE 3 – In some jurisdictions, it may be necessary to send either A43 or A43C carrier sets, or both simultaneously, with appropriate shaping, leaving the receiver to select which carrier set to use.

NOTE 4 – This carrier set shall only be used in the coax environment to support transceivers that implement a version of ITU-T G.994.1 prior to ITU-T G.994.1 (2021). Those prior versions have no support of F43c.

NOTE 5 – This carrier set is intended only for the coax environment and shall be used instead of F43, in the aim to reduce interference into G.993.2 systems if it is sent on twisted pair by an HSTU-R supporting multiple media.

Table 2 – Mandatory carrier sets

xDSL Recommendation(s)	Carrier set designation(s)
ITU-T G.992.1 – Annex A, ITU-T G.992.2 – Annexes A/B, ITU-T G.992.3 – Annexes A/I/L, ITU-T G.992.4 – Annexes A/I, ITU-T G.992.5 – Annexes A/I ITU-T G.993.2 where support of a profile requiring US0 (Note 4)	A43
ITU-T G.992.5 – Annexes A/I (Note 1), ITU-T G.992.5 – Annexes J/M (Note 2) ITU-T G.993.2 where support of a profile requiring US0 (Notes 1, 4)	A43c
ITU-T G.992.1 – Annex B, ITU-T G.992.3 – Annex B, ITU-T G.992.5 – Annex B ITU-T G.993.2 where support of a profile requiring US0 (Note 4)	B43
ITU-T G.992.5 – Annex B (Note 3)	B43c
ITU-T G.992.1 – Annexes C/H/I, ITU-T G.992.2 – Annex C, ITU-T G.992.3 – Annex C, ITU-T G.992.5 – Annex C ITU-T G.993.2 where support of a profile requiring US0 (Note 4)	C43
ITU-T G.992.3 – Annexes J/M, ITU-T G.992.5 – Annexes J/M	J43 (Note 6)
ITU-T G.993.1 – Using multi-carrier modulation (except Annex C) ITU-T G.993.2 where support of a profile not requiring US0	V43
ITU-T G.993.1 – Annex C using multi-carrier modulation over POTS	V43P
ITU-T G.993.1 – Annex C using multi-carrier modulation over ISDN-BA	V43I
ITU-T G.993.1 – Using single-carrier modulation over POTS	V43P-S
ITU-T G.993.1 – Using single-carrier modulation over ISDN-BA	V43I-S
ITU-T G.993.1 – Using single-carrier modulation over TCM-ISDN	V43-S
ITU-T G.9701 (AB43) ITU-T G.9711 (M43t)	A43,B43
ITU-T G.9701 (AA43c) ITU-T G.9711 (M43t1)	A43,A43c
ITU-T G.9701 Annex X with operation over coax (Note 7) ITU-T G.9711 Annex Q (M43c)	F43c

Table 2 – Mandatory carrier sets

xDSL Recommendation(s)	Carrier set designation(s)
NOTE 1 – To be used where spectrum management forbids use of the downstream carrier set A43, typically where ITU-T G.992.5 or ITU-T G.993.2 is deployed from a cabinet. NOTE 2 – To be used where spectrum management forbids use of the downstream carrier set J43, typically where ITU-T G.992.5 is deployed from a cabinet. NOTE 3 – To be used where spectrum management forbids use of the downstream carrier set B43, typically where ITU-T G.992.5 is deployed from a cabinet. NOTE 4 – At least one of the carrier sets A43, B43, and C43 shall be transmitted, depending on the US0 band supported. NOTE 5 – If multimode operation is supported, the HSTU shall transmit the carrier sets corresponding to all enabled modes simultaneously. NOTE 6 – If ITU-T G.992.3 or ITU-T G.992.5 Annex B is also supported by the HSTU-R, the upstream carrier set J43 shall be optional and it should not be transmitted as it can interfere with ISDN present on the same line. In this case the carrier set B43 shall be transmitted. In previous versions of Recommendation ITU-T G.994.1, the J43 carrier set was mandatory. Therefore, HSTU-C implementing a previous version of Recommendation ITU-T G.994.1 may not respond appropriately. NOTE 7 – HSTU-R implementing a version of ITU-T G.994.1 prior to ITU-T G.994.1 (2018) transmits F43 instead of F43c.	

6.1.2 4 kHz signalling family

Carrier frequencies within this signalling family are given by N × 4 kHz, where N is a positive integer. The symbol rate shall be 4000/5 ≡ 800 symbols per second.

Within this family there is one upstream carrier set, designated A4. The associated downstream carrier set has the same designation. The carrier frequencies and the maximum transmit power level per carrier are defined in Table 3, where frequency = N × 4 kHz.

The carrier sets in this family are mandatory for the xDSL modes listed in Table 4. One or more carrier(s) listed in Tables 1 or 3 may be transmitted in addition to the mandatory carrier set listed in Table 4. Carriers not listed in Tables 1 or 3 shall not be transmitted.

Table 3 – Carrier sets for the 4 kHz signalling family

Carrier set designation	Upstream carrier sets		Downstream carrier sets		Transmission mode
	Frequency indices (N)	Maximum power level/carrier (dBm)	Frequency indices (N)	Maximum power level/carrier (dBm)	
A4	3	+5	5	+5	Half-duplex only

Table 4 – Mandatory carrier sets

xDSL Recommendation(s)	Carrier set designation
ITU-T G.991.2	A4

6.2 Modulation

All messages in ITU-T G.994.1 are sent with one or more carrier sets. All carrier frequencies within a carrier set, and all carrier sets, are simultaneously modulated with the same data bits using differentially encoded binary phase shift keying (DPSK). The transmit point is rotated 180° from the

previous point if the transmit bit is a 1, and the transmit point is rotated 0° from the previous point if the transmit bit is a 0.

For each signal transmitted, the transmit signal shall have a rectangular pulse shaping, defined as:

$$s(t) = \left[\left(\sum_i B_i \times \cos(2\pi f_i t + \varphi_i) \right) \times \left(\sum_n A_n \times rect(t - nT) \right) \right] \otimes h_{tx}(t)$$

where:

$\times$ means signal multiplication

$\otimes$ means signal convolution

f_i are the ITU-T G.994.1 carrier frequencies (defined in clause 6.1)

φ_i are the ITU-T G.994.1 carrier phases (discretionary constants)

B_i are the ITU-T G.994.1 carrier gain scalings

T is the symbol period

$T =$ (8/4312.5) seconds for the 4.3125 kHz signalling family and (5/4000) seconds for the 4 kHz signalling family

$A_n =$ +1 or –1 and is differentially encoded according to:

$A_n = A_{n-1}$ if $b_n = 0$

$A_n = -A_{n-1}$ if $b_n = 1$

b_n represents the bit transmitted in symbol n

rect(t) is a rectangular pulse shape defined by:

rect(t) = 1 if $|t| < T/2$

= 0 otherwise

h_{tx} represents the impulse response of the transmit filter

6.3 Transmit filter characteristics

6.3.1 4.3125 kHz signalling family

For the 4.3125 kHz signalling family, the transmit filter shall have a bandwidth such that all of the −3 dB points of the filter shall have frequencies which differ at least 4.3125 kHz from any ITU-T G.994.1 carrier frequency used.

6.3.2 4 kHz signalling family

The transmit spectrum is shaped by the rectangular pulse filtering of the modulation; no additional shaping is needed to be introduced by the transmit filter. Therefore, for the 4 kHz signalling family, the transmit filter shall not introduce significant distortion to the rectangular pulse shaping. Specifically, at frequencies less than ±4 kHz from the carrier frequency, the magnitude response of the transmit filter shall have less than ±0.5 dB variation from the magnitude response at the carrier frequency. At other frequencies the magnitude response of the transmit filter shall not exceed the magnitude response at the carrier frequency. The magnitude response at the carrier frequency is such that the maximum power requirements in Table 3 are satisfied. Variation in the group delay of the transmit filter should not be excessive at frequencies that are less than ±4 kHz from the carrier frequency.

7 Description of messages

7.1 CL – Capabilities list

This message may be sent by an HSTU-C in response to the reception of either a complete CLR message or an intermediate frame of a segmented CLR message. It conveys a list of possible modes of operation of the xTU-C.

7.2 CLR – Capabilities list + request

This message may be sent by an HSTU-R. It conveys a list of possible modes of operation of the xTU-R and requests the transmission of a CL message by the HSTU-C.

7.3 MR – Mode request

This message may be sent by an HSTU-R. It requests the transmission of an MS message by the HSTU-C.

7.4 MS – Mode select

This message may be sent by an HSTU-C or an HSTU-R. It requests the initiation of a particular mode of operation.

7.5 MP – Mode proposal

This message may be sent by an HSTU-R. It proposes a particular mode of operation and requests the transmission of an MS message by the HSTU-C.

7.6 ACK(1) – Acknowledgement, type 1

This message either:

- acknowledges receipt of a complete CL message or an intermediate frame of a segmented CL message and ends an ITU-T G.994.1 transaction; or
- acknowledges receipt of a complete MS message or an intermediate frame of a segmented MS message and initiates the ITU-T G.994.1 session cleardown procedure specified in clause 11.3.

7.7 ACK(2) – Acknowledgement, type 2

This message acknowledges receipt of an intermediate frame of a segmented CL, CLR, MP or MS message and requests the transmission of the next frame of the message.

7.8 NAK-EF – Negative Acknowledgement, errored frame

This message may be sent by an HSTU-C or HSTU-R in response to the reception of an errored frame. It aborts an ITU-T G.994.1 session in accordance with the error recovery procedure specified in clause 12.

7.9 NAK-NR – Negative Acknowledgement, not ready

This message may be sent by an HSTU-C or an HSTU-R to acknowledge receipt of a complete MS message or an intermediate frame of a segmented MS message. It ends an ITU-T G.994.1 transaction. It indicates that the receiving station is temporarily unable (i.e., not ready) to invoke the mode requested by the transmitting station, but wishes to continue the ITU-T G.994.1 session.

7.10 NAK-NS – Negative Acknowledgement, not supported

This message may be sent by an HSTU-C or an HSTU-R to acknowledge receipt of a complete MP or MS message or an intermediate frame of a segmented MP or MS message. It ends an ITU-T G.994.1 transaction. For a received message with the same or lower ITU-T G.994.1 version number, transmission of NAK-NS indicates that the receiving station either does not support or has disabled the mode requested by the transmitting station. For a received message with a higher ITU-T G.994.1 version number, NAK-NS indicates either reception of an unknown message type or reception of an unexpected message according to the transactions defined in this version of the Recommendation.

7.11 NAK-CD – Negative Acknowledgement, cleardown

This message may be sent in response to any frame of a message other than one of the NAK messages. It indicates that the received information was not understood. This may be due to an unknown message type (same or lower ITU-T G.994.1 version level), an unexpected message type according to the defined transactions (same or lower ITU-T G.994.1 version level), or a syntax error while parsing the message. Since a NAK-CD normally indicates a lack of compliance with this Recommendation, it initiates the ITU-T G.994.1 session cleardown procedure specified in clause 11.3.

7.12 REQ-MS – Request MS message

This message may be sent by an HSTU-C in response to the reception of an MR message. It requests the transmission of an MS message by the HSTU-R. It indicates that the HSTU-C does not wish to select a mode and is deferring the mode selection to the HSTU-R.

7.13 REQ-MR – Request MR message

This message may be sent by an HSTU-C in response to the reception of a complete MS message or an intermediate frame of a segmented MS message. It requests the transmission of an MR message by the HSTU-R. It indicates that the HSTU-C wishes to select the mode.

7.14 REQ-CLR – Request CLR message

This message may be sent by an HSTU-C in response to the reception of either an MR message, a complete MP or MS message, or an intermediate frame of a segmented MP or MS message. It requests the transmission of a CLR message by the HSTU-R. It indicates that the HSTU-C wishes to perform a capabilities exchange.

7.15 REQ-RTX – Retransmission message

This message may be sent instead of the NAK-EF message by an HSTU-C or an HSTU-R in response to the reception of an errored frame. It requests the retransmission of the errored frame.

8 Structure of messages

A message consists of one or more segments. Each segment is encapsulated in a frame.

8.1 Format convention

The basic format convention used for messages is illustrated in Figure 2. Bits are grouped into octets. The bits of each octet are shown horizontally and are numbered from 1 to 8. Octets are displayed vertically and are numbered from 1 to N.

The octets are transmitted in ascending numerical order. Within an octet, bit 1 is the first bit to be transmitted.

For fields that are contained within a single octet, the lowest numbered bit of the field represents the least significant bit (2^0). When a field spans multiple octets, the lowest numbered bit of the field in the highest numbered octet containing the field represents the least significant bit (2^0). The order of bit values within each octet increases as the bit number increases. The order of bit values from octet to octet increases as the octet number decreases. Figure 3 illustrates a field that spans two octets.

An exception to this convention is the frame check sequence (FCS) field, which spans two octets. In this case, the order of bit values within the octets is reversed. Bit 1 of the first octet is the MSB and bit 8 of the second octet is the LSB (Figure 4).



Figure 2 – Format convention

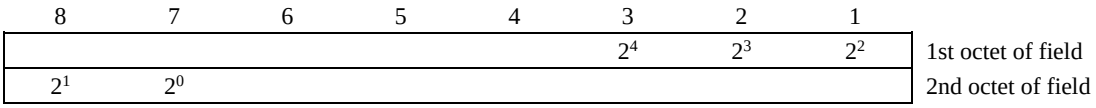


Figure 3 – Field mapping convention

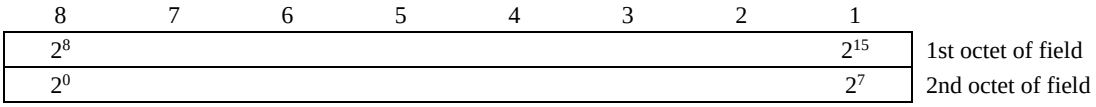


Figure 4 – FCS mapping convention

8.2 Frame structure

The frame structure is shown in Figure 5. The contents of a frame shall consist of an integer number of octets.

Frames shall begin and end with standard HDLC flag octets (01111110) as defined in [ISO/IEC 13239]. At least three but not more than five flags shall be sent to begin a frame. At least two but not more than three flags shall follow the FCS of each frame.

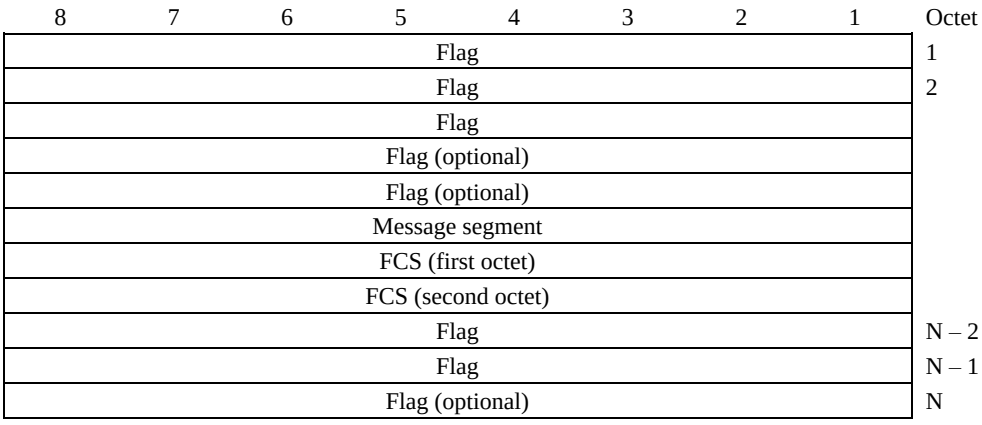


Figure 5 – Frame structure

8.3 Frame check sequence field

The FCS field is 16 bits (2 octets) in length. As defined in [ISO/IEC 13239], it shall be the ones complement of the sum (modulo 2) of:

a) the remainder of x^k ($x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$) divided (modulo 2) by the generator polynomial $x^{16} + x^{12} + x^5 + 1$, where k is the number of bits in the frame existing between, but not including, the last bit of the final opening flag and the first bit of the FCS, excluding octets inserted for transparency; and

b) the remainder of the division (modulo 2) by the generator polynomial $x^{16} + x^{12} + x^5 + 1$, of the product of x^{16} by the content of the frame existing between, but not including, the last bit of the final opening flag and the first bit of the FCS, excluding octets inserted for transparency.

As a typical implementation at the transmitter, the initial content of the register of the device computing the remainder of the division is preset to all binary ONEs and is then modified by division by the generator polynomial (as described above) on the information field. The ones complement of the resulting remainder is transmitted as the 16-bit FCS.

As a typical implementation at the receiver, the initial content of the register of the device computing the remainder of the division is preset to all binary ONEs. The final remainder, after multiplication by x^{16} and then division (modulo 2) by the generator polynomial $x^{16} + x^{12} + x^5 + 1$ of the serial incoming protected bits and the FCS after removal of the transparency octets, will be 0001110100001111_2 (x^{15} to x^0, respectively) in the absence of transmission errors.

8.4 Octet transparency

ITU-T G.994.1 messages use the octet transparency method defined in [ISO/IEC 13239]. In this approach, any data that is equal to $7E_{16}$ (the flag sequence) or $7D_{16}$ (the control escape) are escaped as described below.

After frame check sequence (FCS) computation, the transmitter examines the entire frame between the two flag sequences. Any data octets that are equal to the flag sequence or the control escape are replaced by a two-octet sequence consisting of the control escape octet followed by the original octet exclusive-OR'ed with hexadecimal 20_{16}. In summary, the following substitutions are made:

- a data octet of $7E_{16}$ is encoded as two octets {$7D_{16}$, $5E_{16}$};
- a data octet of $7D_{16}$ is encoded as two octets {$7D_{16}$, $5D_{16}$}.

On reception, prior to FCS computation, each control escape octet ($7D_{16}$) is removed, and the following octet is exclusive-OR'ed with hexadecimal 20_{16} (unless the following octet is $7E_{16}$, which is the flag, and indicates the end of frame, and therefore an abort has occurred). In summary, the following substitutions are made:

- a sequence of $7D_{16}$, $5E_{16}$ is replaced by the data octet $7E_{16}$;
- a sequence of $7D_{16}$, $5D_{16}$ is replaced by the data octet $7D_{16}$;
- a sequence of $7D_{16}$, $7E_{16}$ aborts the frame.

Since octet stuffing is used, the frame is guaranteed to have an integer number of octets.

8.5 Inter-frame time fill

In duplex mode, an integer number of flags shall be transmitted between frames. In half-duplex mode, silence shall be transmitted between frames.

9 Message coding format

9.1 General

The message information field consists of three components:

a) an identification field (I); followed by

b) a standard information field (S); and

c) an optional non-standard information field (NS).

This general structure is shown in Figure 6.

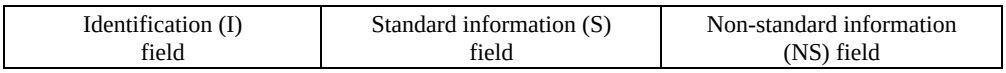


Figure 6 – Information field structure

9.2 Coding format for parameters in the I and S fields

In both the I and S fields, most of the information to be conveyed consists of parameters relating to particular modes, features or capabilities associated with the two stations.

In order to:

a) encode these parameters in accordance with a consistent set of rules; and

b) allow future extension to the parameter list in a way that permits present and future ITU-T G.994.1 implementations to correctly parse the information field,

the parameters are linked together in a pre-defined tree structure. The order in which the parameters in the tree are transmitted and the use of delimiting bits that enable the tree to be reconstructed at the receiver are described in the rules set out below.

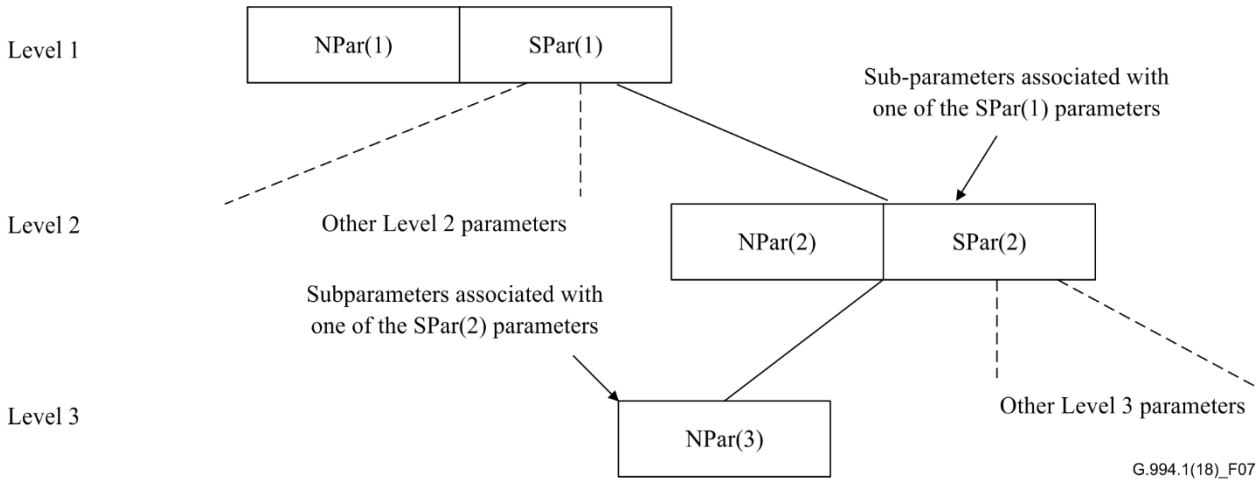
9.2.1 Parameter classification

Parameters (Pars) are classified as:

- NPars – Parameters which have no subparameters associated with them; and
- SPars – Parameters that have subparameters associated with them.

The general structure of this tree is as shown in Figure 7.

At level 1, the highest level of the tree, each SPar has associated with it a series of Pars (NPars and possibly SPars) at level 2 in the tree. At level 2 in the tree, each SPar has associated with it a series of NPars at level 3 in the tree. Level 3 is the lowest level in the tree. Therefore, there are no SPars at this level.



NPar(n) indicates a set of NPar parameters at level n in the tree.

Figure 7 – Tree structure linking parameters in the I and S fields

9.2.2 Order of transmission of parameters

Parameters are binary encoded and transmitted serially. Parameters of the same type (i.e., level, classification and association) are transmitted sequentially as a parameter block consisting of an integral number of octets.

The order of transmission of NPars and SPars is specified in Figure 8.

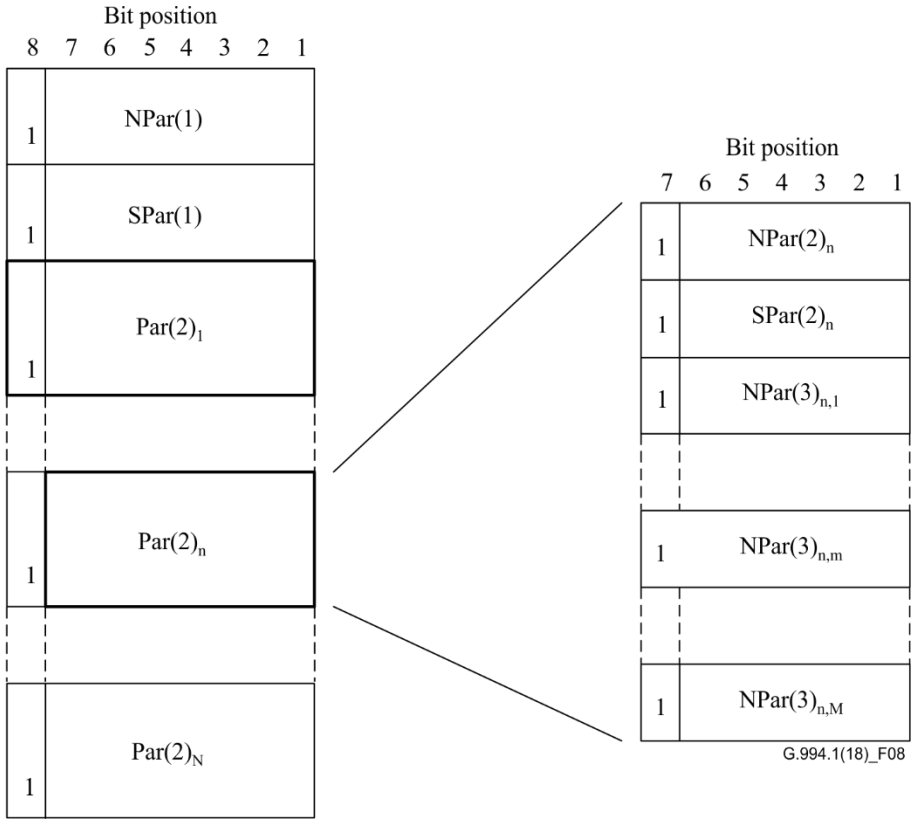


Figure 8 – Order of transmission of NPars and SPars

$Par(2)_n$ indicates a set of level 2 parameters associated with the nth level 1 SPar, and consists of $NPar(2)_n$ parameters and possibly $SPar(2)_n$ parameters.

$NPar(3)_{n, m}$ indicates a set of level 3 NPars associated with the mth level 2 SPar which in turn is associated with the nth level 1 SPar.

Transmission of parameters begins with the first octet of NPar(1) and ends with the last octet of $Par(2)_N$.

The order of transmission of the Par(2) blocks is the same as the order of transmission of the corresponding SPar(1) bits. Similarly, the order of transmission of the $NPar(3)_n$ blocks is the same as the order of transmission of the corresponding $SPar(2)_n$ bits.

9.2.3 Delimiting and parsing of parameter blocks

The use of delimiting bits is illustrated in Figure 8. Within each octet of a parameter block, at least one bit is defined as a delimiting bit. This is used to define the last octet in the block to be transmitted. A binary ZERO in this bit position indicates that there is at least one additional octet in the block to be transmitted. A binary ONE in this bit position indicates the last octet in the block to be transmitted.

Bit 8 is used to delimit the NPar(1) block, the SPar(1) block and each of the Par(2) blocks. There are N of these Par(2) blocks, one for each of the capabilities in the SPar(1) block that is enabled (set to binary ONE).

In order for this parsing rule to function correctly, both the identification field (I) and the standard information field (S) shall include at least one octet of NPar(1) and at least one octet of SPar(1).

Bit 7 is used to delimit each NPar(2) block, each SPar(2) block and each of the associated NPar(3) blocks. Figure 8 indicates that there are M of these NPar(3) blocks, one for each of the capabilities in the $SPar(2)_n$ block that is enabled (set to binary ONE). M may be different for each of the Par(2) blocks.

A Par(2) block may either contain both NPar(2) and SPar(2) octets, or NPar(2) octets alone. To indicate that a Par(2) block contains only NPar(2) octets, bits 7 and 8 are both set to binary ONE in the last NPar(2) octet to be transmitted.

Bits 1 to 7 at level 1 of the tree and bits 1 to 6 at levels 2 and 3 of the tree may be used to encode parameters.

Octets at the end of any Par block that would have contained all ZEROs except for delimiting bits may be omitted from transmission, provided that terminating bits are correctly set for the transmitted octets.

To allow for compatibility with future versions of this Recommendation, receivers shall parse all parameter blocks and ignore information that is not understood. However, to be able to correctly parse the parameter blocks, it is necessary to pay attention to the number of SPar(1) and SPar(2) bits that are set, even if the meaning of one or more of these bits is not understood.

9.3 Identification field (I)

The identification field consists of four components:

a) a one-octet message type field; followed by

b) a one-octet version number field;

c) an additional information field; and

d) a bit-encoded parameter field.

This general structure is shown in Figure 9.

Message type field	Version number field	Additional information field	Bit-encoded parameter field

Figure 9 – Identification field structure

9.3.1 Message type field

The purpose of the message type field is to identify the message type of the frame. The field is one octet in length and occupies the first octet in the identification field. The tree structure encoding rules specified in clause 9.2 are not applicable to this field. The encoding shall be as shown in Table 5. An "X" indicates that the message type is supported for the stated version number (see clause 9.3.2) whilst a "–" indicates that it is not.

NOTE – Message types other than those specified in Table 5 are reserved for allocation by ITU-T.

Table 5 – Message type field format

Bits								Message type	ITU-T G.994.1 version 1 support	ITU-T G.994.1 version 2 support	ITU-T G.994.1 version 3 support
8	7	6	5	4	3	2	1				
0	0	0	0	0	0	0	0	MS	X	X	X
0	0	0	0	0	0	0	1	MR	X	X	X
0	0	0	0	0	0	1	0	CL	X	X	X
0	0	0	0	0	0	1	1	CLR	X	X	X
0	0	0	0	0	1	0	0	MP	–	X	X
0	0	0	1	0	0	0	0	ACK(1)	X	X	X
0	0	0	1	0	0	0	1	ACK(2)	X	X	X
0	0	1	0	0	0	0	0	NAK-EF	X	X	X
0	0	1	0	0	0	0	1	NAK-NR	X	X	X
0	0	1	0	0	0	1	0	NAK-NS	X	X	X
0	0	1	0	0	0	1	1	NAK-CD	X	X	X
0	0	1	1	0	1	0	0	REQ-MS	X	X	X
0	0	1	1	0	1	0	1	REQ-MR	X	X	X
0	0	1	1	0	1	1	1	REQ-CLR	X	X	X
0	0	1	1	1	0	0	0	REQ-RTX	–	–	X

9.3.2 Version number field

The purpose of the version number field is to identify the version number of ITU-T G.994.1 to which the equipment conforms.

This Recommendation includes the functionality of ITU-T G.994.1 – (2002 (Version 2)) in its entirety and therefore replaces it. It also specifies new functionality by way of a new message type and new transactions, resulting in Version 3.

ITU-T G.994.1 – 2002 (Version 2), in turn, included the functionality of ITU-T G.994.1 – 1999 (Version 1) in its entirety and therefore replaced it. It also specified new functionality by way of a new message type and new transactions, resulting in Version 2.

Tables 5, 13 and 14 indicate the message types, basic transactions and extended transactions, respectively, that are supported by each version. All transmitted messages shall indicate the highest version number supported by the transmitting equipment, independent of the version number received in any message.

NOTE 1 – The version number of ITU-T G.994.1 is not updated with the addition of new codepoints. The version number is updated when a structural change is made. Examples of structural changes are the addition of new message types and new transactions. To ensure backward compatibility, future versions with higher version numbers will include, without change, all of the existing transactions, messages and information from previous versions. There is no relationship between the ITU-T G.994.1 version number and the document in which particular parameters are first defined. For example, parameters defined for the first time in this

Recommendation, such as those for ITU-T G.992.5 Annex A, may be used by a Version 1 or 2 implementation of ITU-T G.994.1.

If the received message is an MS, it is the expected message according to the defined transactions, and it can be parsed correctly; it shall be ACKed if the features are supported, independent of the version number of the message.

If the received message is of an unknown type or is not the expected message according to the defined transactions, and the version number field indicates a higher version, a NAK-NS shall be sent.

The field is one octet in length and occupies the second octet of the identification field. The tree structure encoding rules specified in clause 9.2 are not applicable to this field. The encoding shall be in accordance with Table 6.

NOTE 2 – Version numbers other than those specified in Table 6 are reserved for allocation by ITU-T.

Table 6 – Version number field format

Bits								Version number
8	7	6	5	4	3	2	1	
0	0	0	0	0	0	0	1	Version 1
0	0	0	0	0	0	1	0	Version 2
0	0	0	0	0	0	1	1	Version 3

9.3.3 Additional information field

The additional information field consists of either a vendor ID information block or a retransmission information block according to Table 12.

9.3.3.1 Vendor ID information block

Coding for the vendor ID information block is shown in Table 7. The tree structure encoding rules specified in clause 9.2 are not applicable to this field. For MP, MR, MS, ACK, NAK and REQ messages, the vendor ID field is not used and is therefore of zero length.

NOTE – This field should typically identify the vendor of the ITU-T G.994.1 functionality, whether implemented in hardware or software. It is not intended to indicate the system integrator.

Table 7 – Vendor ID information block

T.35 country code (2 octets – Note 1)
Provider code (vendor identification) (4 octets – Note 2)
Vendor-specific information (2 octets)
NOTE 1 – If the bits in the first octet are not all set to binary ONE, the bits in the second octet shall be set to binary ZERO by the transmitter and ignored by the receiver. The only purpose of the country code is to identify the country of registry of the provider code. NOTE 2 – Specification of the coding and order of transmission of this field is the responsibility of the regional standards body allocating the provider code. See Appendix II for provider code contact information.

9.3.3.2 Retransmission information block

Coding of the retransmission information block is shown in Table 7.1. The tree structure encoding rules specified in clause 9.2 are not applicable to this field. The retransmission information block

shall only be used for REQ-RTX messages. For all other message types, the retransmission information block is not used and is therefore of zero length.

Table 7.1 – Retransmission information block

Last correctly received message (LCRM) (1 octet – Note 1)
Multi segment frame number (MSFN) (1 octet – Note 2)
NOTE 1 – This octet contains the message type code of the last correctly received frame. The NULL message code (FF_{16}) shall be used if an error free frame has not been received in the current ITU-T G.994.1 session. NOTE 2 – This octet contains the segment index number of a message that has been segmented into more than one frame. The first segment or message contained in one frame shall have an MSFN value of 0. The second segment shall have an MSFN value of 1 and so on. Although the segmented frames are not explicitly numbered, the HSTU-R and HSTU-C shall maintain internal counters.

9.3.4 Parameter field

This field contains parameters that are independent of the mode to be selected and are typically either service or application related.

The parameter field of CL, CLR, MP and MS messages is encoded in accordance with the rules described in clause 9.2. For MR, ACK, NAK and REQ messages, the parameter field is not used and is therefore of zero length.

The parameter field consists of a set of octets in which each parameter is assigned a unique bit position. A binary ONE in the assigned bit position indicates that the parameter is valid. The validity of multiple parameters may be conveyed by transmitting a binary ONE in each bit position corresponding to a valid parameter.

The NPars and SPars are listed below, beginning with Table 8.

Editorial note – In this Recommendation, the numbering of the tables related to NPars and SPars reflect the tree of codepoints, and does not follow the usual strict sequential numbering.

Table 8 – Identification field – NPar(1) coding

Bits								NPar(1)s
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Downstream shaping (Note)
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	1	x	x	x	x	x	x	Non-standard field
x	0	0	0	0	0	0	0	No parameters set in this octet

NOTE – If set to ONE by an HSTU-R, indicates that the HSTU-R supports shaping of the downstream carriers within a carrier set (see clause 6.1.1). If set to ZERO by an HSTU-R, no indication is given about support of shaping by the HSTU-R. This bit shall be set to ZERO by an HSTU-C.

Table 9 – Identification field – SPar(1) coding – Octet 1

Bits								SPar(1)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Net data rate upstream (Note 1)
x	x	x	x	x	x	1	x	Net data rate downstream (Note 1)
x	x	x	x	x	1	x	x	Data flow characteristics upstream (Note 2)
x	x	x	x	1	x	x	x	Data flow characteristics downstream (Note 2)
x	x	x	1	x	x	x	x	xTU-R splitter information (Note 3)
x	x	1	x	x	x	x	x	xTU-C splitter information (Note 3)
x	1	x	x	x	x	x	x	Transceiver and system ID
x	0	0	0	0	0	0	0	No parameters set in this octet

NOTE 1 – In a CLR, CL or MP message, the data rates indicated in this Recommendation are of informative nature and do not imply any requirements on the net data rate during data mode. The data rate values are set and used by layers higher than the xTU-x although an xTU-x may monitor the information. The data rate values are useful to help the higher layers to select between the various ITU-T G.99x.x transceivers based upon information indicated by an application layer.

In an MS message:

- If the xTU-x is capable of supporting the information, it shall respond with an ACK.
- If the xTU-x is either not capable of supporting the information or the negotiation of this information, it shall respond with a NAK-NS.

NOTE 2 – In a CLR, CL or MP message, the latencies indicated in this Recommendation are of informative nature and do not imply any requirements on the latency during data mode. The latency values are set and used by layers higher than the xTU-x although an xTU-x may monitor the information. The latency values are useful to help the higher layers to select between the various ITU-T G.99x.x transceivers and coding parameters based upon information indicated by an application layer.

In an MS message:

- If the xTU-x is capable of supporting the information, it shall respond with an ACK.
- If the xTU-x is either not capable of supporting the information or the negotiation of this information, it shall respond with a NAK-NS.

NOTE 3 – Splitter information is only conveyed by an xTU-x if it has the capability of determining the local splitter information. Splitter information is only a capabilities indication and shall not be included in an MP or MS message.

Table 9.0.1 – Identification field – SPar(1) coding – Octet 2

Bits								SPar(1)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Relative power level/carrier for upstream carrier set A43 (Note 1)
x	x	x	x	x	x	1	x	Relative power level/carrier for downstream carrier set A43 (Notes 1, 2)
x	x	x	x	x	1	x	x	Relative power level/carrier for upstream carrier set B43 (Note 1)
x	x	x	x	1	x	x	x	Relative power level/carrier for downstream carrier set B43 (Notes 1, 2)
x	x	x	1	x	x	x	x	Relative power level/carrier for upstream carrier set C43 (Note 1)
x	x	1	x	x	x	x	x	Relative power level/carrier for downstream carrier set C43 (Notes 1,2)
x	1	x	x	x	x	x	x	Reserved for allocation by ITU-T
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE 1– The relative power level/carrier provided in a CLR, CL, MP or MS message indicates the transmit level used during the current ITU-T G.994.1 session, including the start-up and cleardown procedures. It does not imply any requirements on the transmit power in this or future sessions.

NOTE 2 – If this bit is set to ONE, all downstream carriers in the carrier set shall be transmitted at the same (indicated) power level.

Table 9.0.2 – Identification field – SPar(1) coding – Octet 3

Bits								SPar(1)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Relative power level/carrier for upstream carrier set A4 (Note 1)
x	x	x	x	x	x	1	x	Relative power level/carrier for downstream carrier set A4 (Notes 1, 2)
x	x	x	x	x	1	x	x	Relative power level/carrier for upstream carrier set A43c (Note 1)
x	x	x	x	1	x	x	x	Relative power level/carrier for downstream carrier set A43c (Notes 1, 2)
x	x	x	1	x	x	x	x	Bonding
x	x	1	x	x	x	x	x	Relative power level/carrier for upstream carrier set J43 (Note 1)
x	1	x	x	x	x	x	x	Relative power level/carrier for downstream carrier set J43 (Notes 1, 2)
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE 1– The relative power level/carrier provided in a CLR, CL, MP or MS message indicates the transmit level used during the current ITU-T G.994.1 session, including the start-up and cleardown procedures. It does not imply any requirements on the transmit power in this or future sessions.

NOTE 2 – If this bit is set to ONE, all downstream carriers in the carrier set shall be transmitted at the same (indicated) power level.

Table 9.0.3 – Identification field – SPar(1) coding – Octet 4

Bits								SPar(1)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Relative power level/carrier for upstream carrier set B43c (Note 1)
x	x	x	x	x	x	1	x	Relative power level/carrier for downstream carrier set B43c (Note 1, 2)
x	x	x	x	x	1	x	x	Relative power level/carrier for upstream carrier set V43 (Note 1)
x	x	x	x	1	x	x	x	Relative power level/carrier for downstream carrier set V43 (Note 1)
x	x	x	1	x	x	x	x	Relative power level for downstream carrier with frequency index N = 12
x	x	1	x	x	x	x	x	Relative power level for downstream carrier with frequency index N = 14
x	1	x	x	x	x	x	x	Relative power level for downstream carrier with frequency index N = 40
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – The relative transmit power level/carrier reported in a CLR, CL, MP or MS message indicates the level used during the current ITU-T G.994.1 session, including the start-up and cleardown procedures. It does not imply any requirements on the transmit power in this or future sessions.

NOTE 2 – If this bit is set to ONE, all downstream carriers in the carrier set shall be transmitted at the same (indicated) power level.

Table 9.0.4 – Identification field – SPar(1) coding – Octet 5

Bits								SPar(1)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Relative power level for downstream carrier with frequency index N = 56
x	x	x	x	x	x	1	x	Relative power level for downstream carrier with frequency index N = 64
x	x	x	x	x	1	x	x	Relative power level for downstream carrier with frequency index N = 72
x	x	x	x	1	x	x	x	Relative power level for downstream carrier with frequency index N = 88
x	x	x	1	x	x	x	x	Relative power level for downstream carrier with frequency index N = 96
x	x	1	x	x	x	x	x	Relative power level for downstream carrier with frequency index N = 257
x	1	x	x	x	x	x	x	Relative power level for downstream carrier with frequency index N = 293
x	0	0	0	0	0	0	0	No parameters in this octet

Table 9.0.5 – Identification field – SPar(1) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	SPar(1)s – Octet 6
x	x	x	x	x	x	x	1	Relative power level for downstream carrier with frequency index N = 337
x	x	x	x	x	x	1	x	Relative power level for downstream carrier with frequency index N = 383
x	x	x	x	x	1	x	x	Relative power level for downstream carrier with frequency index N = 511
x	x	x	x	1	x	x	x	Relative power level for upstream carrier with frequency index N = 7
x	x	x	1	x	x	x	x	Relative power level for upstream carrier with frequency index N = 9
x	x	1	x	x	x	x	x	Relative power level for upstream carrier with frequency index N = 17
x	1	x	x	x	x	x	x	Relative power level for upstream carrier with frequency index N = 25
x	0	0	0	0	0	0	0	No parameters in this octet

Table 9.0.6 – Identification field – SPar(1) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	SPar(1)s – Octet 7
x	x	x	x	x	x	x	1	Relative power level for upstream carrier with frequency index N = 37
x	x	x	x	x	x	1	x	Relative power level for upstream carrier with frequency index N = 45
x	x	x	x	x	1	x	x	Relative power level for upstream carrier with frequency index N = 53
x	x	x	x	1	x	x	x	Relative power level for upstream carrier with frequency index N = 944
x	x	x	1	x	x	x	x	Relative power level for upstream carrier with frequency index N = 972
x	x	1	x	x	x	x	x	Relative power level for upstream carrier with frequency index N = 999
x	1	x	x	x	x	x	x	Reserved for allocation by ITU-T
x	0	0	0	0	0	0	0	No parameters in this octet

Table 9.1 – Identification field – Net data rate upstream NPar(2) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	Net data rate upstream NPar(2)s – Octet 1
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Maximum net data rate upstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Maximum net data rate upstream (bits 5-1 × 64 kbit/s)

Table 9.1.1 – Identification field – Net data rate upstream NPar(2) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	Net data rate upstream NPar(2)s – Octet 2
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Minimum net data rate upstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Minimum net data rate upstream (bits 5-1 × 64 kbit/s)

Table 9.1.2 – Identification field – Net data rate upstream NPar(2) coding – Octet 3

Bits								Net data rate upstream NPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Average net data rate upstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Average net data rate upstream (bits 5-1 × 64 kbit/s)

Table 9.3 – Identification field – Net data rate downstream NPar(2) coding – Octet 1

Bits								Net data rate downstream NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Maximum net data rate downstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Maximum net data rate downstream (bits 5-1 × 64 kbit/s)

Table 9.3.1 – Identification field – Net data rate downstream NPar(2) coding – Octet 2

Bits								Net data rate downstream NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Minimum net data rate downstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Minimum net data rate downstream (bits 5-1 × 64 kbit/s)

Table 9.3.2 – Identification field – Net data rate downstream NPar(2) coding – Octet 3

Bits								Net data rate downstream NPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	1	x	x	x	x	x	Average net data rate downstream (bits 5-1 × 2 Mbit/s)
x	x	0	x	x	x	x	x	Average net data rate downstream (bits 5-1 × 64 kbit/s)

Table 9.5 – Identification field – Data flow characteristics upstream NPar(2) coding – Octet 1

Bits								Data flow characteristics upstream NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	0	x	x	x	x	x	Maximum latency upstream (bits 5 to 1) × 1 ms
x	x	1	x	x	x	x	x	Maximum latency upstream (4 + bits 5 to 1) × 10 ms

Table 9.5.1 – Identification field – Data flow characteristics upstream NPar(2) coding – Octet 2

Bits								Data flow characteristics upstream Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	0	x	x	x	x	x	Average latency upstream (bits 5 to 1) × 1 ms
x	x	1	x	x	x	x	x	Average latency upstream (4 + bits 5 to 1) × 10 ms

Table 9.7 – Identification field – Data flow characteristics downstream NPar(2) coding – Octet 1

Bits								Data flow characteristics downstream NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	0	x	x	x	x	x	Maximum latency downstream (bits 5 to 1) × 1 ms
x	x	1	x	x	x	x	x	Maximum latency downstream (4 + bits 5 to 1) × 10 ms

Table 9.7.1 – Identification field – Data flow characteristics downstream NPar(2) coding – Octet 2

Bits								Data flow characteristics downstream NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	Unspecified by terminal
x	x	0	x	x	x	x	x	Average latency downstream (bits 5 to 1) × 1 ms
x	x	1	x	x	x	x	x	Average latency downstream (4 + bits 5 to 1) × 10 ms

Table 9.9 – Identification field – xTU-R splitter information NPar(2) coding

Bits								xTU-R splitter information NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	LPF is voice
x	x	x	x	x	x	1	x	LPF is USA ISDN
x	x	x	x	x	1	x	x	LPF is European ISDN
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Non-standard LPF
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.11 – Identification field – xTU-C splitter information NPar(2) coding

Bits								xTU-C splitter information NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HPF is 25 kHz (voice)
x	x	x	x	x	x	1	x	HPF is 90 kHz USA ISDN
x	x	x	x	x	1	x	x	HPF is 150 kHz (ADSL with European ISDN)
x	x	x	x	1	x	x	x	HPF is 300 kHz (VDSL)
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Non-standard HPF
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.13 – Identification field – Transceiver ID NPar(2) – Octet 1

Bits								Transceiver ID NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.14 – Identification field – Transceiver ID SPar(2) – Octet 1

Bits								Transceiver ID SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Network side transceiver ID
x	x	x	x	x	x	1	x	Remote side transceiver ID
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Remote side NT ID
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.14.1 – Identification field – Network side transceiver ID NPar(3) coding – Octet 1

Bits								Network side transceiver ID NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Network side transceiver ID (bits 30 to 25)

Table 9.14.1.1 – Identification field – Network side transceiver ID NPar(3) coding – Octet 2

Bits								Network side transceiver ID NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Network side transceiver ID (bits 24 to 19)

Table 9.14.1.2 – Identification field – Network side transceiver ID NPar(3) coding – Octet 3

Bits								Network side transceiver ID NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Network side transceiver ID (bits 18 to 13)

Table 9.14.1.3 – Identification field – Network side transceiver ID NPar(3) coding – Octet 4

Bits								Network side transceiver ID NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Network side transceiver ID (bits 12 to 7)

Table 9.14.1.4 – Identification field – Network side transceiver ID NPar(3) coding – Octet 5

Bits								Network side transceiver ID NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Network side transceiver ID (bits 6 to 1)

Table 9.14.2 – Identification field – Remote side transceiver ID NPar(3) coding – Octet 1

Bits								Remote side transceiver ID NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side transceiver ID (bits 30 to 25)

Table 9.14.2.1 – Identification field – Remote side transceiver ID NPar(3) coding – Octet 2

Bits								Remote side transceiver ID NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side transceiver ID (bits 24 to 19)

Table 9.14.2.2 – Identification field – Remote side transceiver ID NPar(3) coding – Octet 3

Bits								Remote side transceiver ID NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side transceiver ID (bits 18 to 13)

Table 9.14.2.3 – Identification field – Remote side transceiver ID NPar(3) coding – Octet 4

Bits								Remote side transceiver ID NPar(3)s – Octet 4
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side transceiver ID (bits 12 to 7)

Table 9.14.2.4 – Identification field – Remote side transceiver ID NPar(3) coding – Octet 5

Bits								Remote side transceiver ID NPar(3)s – Octet 5
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side transceiver ID (bits 6 to 1)

Table 9.14.4 – Identification field – Remote side NT ID NPar(3) coding – Octet 1

Bits								Remote side NT ID NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	0	0	0	x	x	Remote side NT ID (bits 128 to 127)

Table 9.14.4.1 – Identification field – Remote side NT ID NPar(3) coding – Octet 2

Bits								Remote side NT ID NPar(3)s – Octet j+1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
X	x	x	x	x	x	x	x	Remote side NT ID (bits 126 to 121)

Table 9.14.4.2 – Identification field – Remote side NT ID NPar(3) coding – Octet 3

Bits								Remote side NT ID NPar(3)s – Octet 3
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 120 to 115)

Table 9.14.4.3 – Identification field – Remote side NT ID NPar(3) coding – Octet 4

Bits								Remote side NT ID NPar(3)s – Octet 4
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 114 to 109)

Table 9.14.4.4 – Identification field – Remote side NT ID NPar(3) coding – Octet 5

Bits								Remote side NT ID NPar(3)s – Octet 5
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 108 to 103)

Table 9.14.4.5 – Identification field – Remote side NT ID NPar(3) coding – Octet 6

Bits								Remote side NT ID NPar(3)s – Octet 6
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 102 to 97)

Table 9.14.4.6 – Identification field – Remote side NT ID NPar(3) coding – Octet 7

Bits								Remote side NT ID NPar(3)s – Octet 7
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 96 to 91)

Table 9.14.4.7 – Identification field – Remote side NT ID NPar(3) coding – Octet 8

Bits								Remote side NT ID NPar(3)s – Octet 8
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 90 to 85)

Table 9.14.4.8 – Identification field – Remote side NT ID NPar(3) coding – Octet 9

Bits								Remote side NT ID NPar(3)s – Octet 9
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 84 to 79)

Table 9.14.4.9 – Identification field – Remote side NT ID NPar(3) coding – Octet 10

Bits								Remote side NT ID NPar(3)s – Octet 10
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 78 to 73)

Table 9.14.4.10 – Identification field – Remote side NT ID NPar(3) coding – Octet 11

Bits								Remote side NT ID NPar(3)s – Octet j+1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 72 to 67)

Table 9.14.4.11 – Identification field – Remote side NT ID NPar(3) coding – Octet 12

Bits								Remote side NT ID NPar(3)s – Octet 12
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 66 to 61)

Table 9.14.4.12 – Identification field – Remote side NT ID NPar(3) coding – Octet 13

Bits								Remote side NT ID NPar(3)s – Octet 13
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 60 to 55)

Table 9.14.4.13 – Identification field – Remote side NT ID NPar(3) coding – Octet 14

Bits								Remote side NT ID NPar(3)s – Octet 14
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 54 to 49)

Table 9.14.4.14 – Identification field – Remote side NT ID NPar(3) coding – Octet 15

Bits								Remote side NT ID NPar(3)s – Octet 15
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 48 to 43)

Table 9.14.4.15 – Identification field – Remote side NT ID NPar(3) coding – Octet 16

Bits								Remote side NT ID NPar(3)s – Octet 16
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 42 to 37)

Table 9.14.4.16 – Identification field – Remote side NT ID NPar(3) coding – Octet 17

Bits								Remote side NT ID NPar(3)s – Octet 17
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 36 to 31)

Table 9.14.4.17 – Identification field – Remote side NT ID NPar(3) coding – Octet 18

Bits								Remote side NT ID NPar(3)s – Octet 18
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 30 to 25)

Table 9.14.4.18 – Identification field – Remote side NT ID NPar(3) coding – Octet 19

Bits								Remote side NT ID NPar(3)s – Octet 19
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 24 to 19)

Table 9.14.4.19 – Identification field – Remote side NT ID NPar(3) coding – Octet 20

Bits								Remote side NT ID NPar(3)s – Octet 20
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 18 to 13)

Table 9.14.4.20 – Identification field – Remote side NT ID NPar(3) coding – Octet 21

Bits								Remote side NT ID NPar(3)s – Octet 21
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 12 to 7)

Table 9.14.4.21 – Identification field – Remote side NT ID NPar(3) coding – Octet 22

Bits								Remote side NT ID NPar(3)s – Octet 22
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote side NT ID (bits 6 to 1)

Table 9.15 – Identification field – Relative power level/carrier for upstream carrier set A43 – NPar(2) coding

Bits								Relative power level/carrier for upstream carrier set A43 Npar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set A43 (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.								

Table 9.17 – Identification field – Relative power level/carrier for downstream carrier set A43 – NPar(2) coding

Bits								Relative power level/carrier for downstream carrier set A43 Npar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set A43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.								

Table 9.19 – Identification field – Relative power level/carrier for upstream carrier set B43 – NPar(2) coding

Bits								Relative power level/carrier for upstream carrier set B43 Npar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set B43 (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.								

Table 9.21 – Identification field – Relative power level/carrier for downstream carrier set B43 – NPar(2) coding – Octet 1

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set B43 Npar(2)s – Octet 1
x x	x x x x x x	Clipped attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set B43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.21.1 – Identification field – Relative power level/carrier for downstream carrier set B43 – NPar(2) coding– Octet 2

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set B43 Npar(2)s – Octet 2
x x	x x x x x x	Remainder of attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1× 0.5 dB) for downstream carrier set B43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.23 – Identification field – Relative power level/carrier for upstream carrier set C43 – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for upstream carrier set C43 Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set C43 (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.		

Table 9.25 – Identification field – Relative power level/carrier for downstream carrier set C43 – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set C43 Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set C43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.29 – Identification field – Relative power level/carrier for upstream carrier set A4 – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for upstream carrier set A4 Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set A4 (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.		

Table 9.31 – Identification field – Relative power level/carrier for downstream carrier set A4 – NPar(2) coding

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for downstream carrier set A4 Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set A4 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.33 – Identification field – Relative power level/carrier for upstream carrier set A43c – NPar(2) coding

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for upstream carrier set A43c Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set A43c (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.		

Table 9.35 – Identification field – Relative power level/carrier for downstream carrier set A43c – NPar(2) coding

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for downstream carrier set A43c Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set A43c (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.37 – Identification field – Bonding NPar(2) coding

Bits 8 7	6 5 4 3 2 1	Bonding NPar(2)s
x x	x x x x x 1	Ethernet bonding
x x	x x x x 1 x	TDIM bonding
x x	x x x 1 x x	ATM bonding
x x	x x 1 x x x	BACP Support
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 9.38 – Identification field – Bonding SPar(2) coding – Octet 1 – Ethernet/TDIM

Bits 8 7	6 5 4 3 2 1	Ethernet/TDIM bonding SPar(2)s
x x	x x x x x 1	PME aggregation discovery
x x	x x x x 1 x	PME aggregation
x x	x x x 1 x x	PME identification
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 9.38.0.1 – Identification field – Bonding SPar(2) coding – Octet 2 – ATM bonding

Bits								ATM bonding SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	PHY layer training parameters
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.38.1 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 1

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Clear if same
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 9.38.1.1 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 2

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 47 to 42

Table 9.38.1.2 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 3

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 41 to 36

Table 9.38.1.3 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 4

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 35 to 30

Table 9.38.1.4 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 5

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 29 to 24

Table 9.38.1.5 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 6

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 23 to 18

Table 9.38.1.6 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 7

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 17 to 12

Table 9.38.1.7 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 8

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 11 to 6

Table 9.38.1.8 – Identification field – Bonding – PME aggregation discovery – NPar(3) coding – Octet 9

Bits								Bonding PME aggregation discovery – NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Remote discovery register, bits 5 to 0

Table 9.38.2 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 1

Bits								Bonding PME aggregation – NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x					x	x	PME_Aggregate_register, bits 31-30 (Octet 1, bits 2 and 1)
x	x	x	x	x	1			Reserved for allocation by ITU-T
x	x	x	x	1	x			Reserved for allocation by ITU-T
x	x	x	1	x	x			Reserved for allocation by ITU-T
x	x	1	x	x	x			Reserved for allocation by ITU-T
x	x	0	0	0	0			No parameters in this octet

Table 9.38.2.1 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	Bonding PME aggregation – NPar(3)s – Octet 2
x x	x x x x x x	PME_Aggregate_register, bits 29 to 24

Table 9.38.2.2 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	Bonding PME aggregation – NPar(3)s – Octet 3
x x	x x x x x x	PME_Aggregate_register, bits 23 to 18

Table 9.38.2.3 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	Bonding PME aggregation – NPar(3)s – Octet 4
x x	x x x x x x	PME_Aggregate_register, bits 17 to 12

Table 9.38.2.4 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	Bonding PME aggregation – NPar(3)s – Octet 5
x x	x x x x x x	PME_Aggregate_register, bits 11 to 6

Table 9.38.2.5 – Identification field – Bonding – PME aggregation – NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	Bonding PME aggregation – NPar(3)s – Octet 6
x x	x x x x x x	PME_Aggregate_register, bits 5 to 0

Table 9.38.3 – Identification field – Bonding – PME Identification – NPar(3) coding

Bits 8 7	6 5 4 3 2 1	Bonding PME Identification NPar(3)s
x x	0 x x x x x	PME_Identification (0 to 31), bits 4 to 0

Table 9.38.7 – Identification field – ATM bonding PHY layer training parameters – NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ATM bonding PHY layer training NPar(3)s – Octet 1
x x	x x x x x x	Maximum downstream differential delay between members of an ATM bonding group (bits 6-1 × 1 ms)

Table 9.39 – Identification field – Relative power level/carrier for upstream carrier set J43 – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for upstream carrier set J43 Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1× 0.5 dB) for upstream carrier set J43 (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.		

Table 9.41 – Identification field – Relative power level/carrier for downstream carrier set J43 – NPar(2) coding – Octet 1

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set J43 Npar(2)s – Octet 1
x x	x x x x x x	Clipped attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set J43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.41.1 – Identification field – Relative power level/carrier for downstream carrier set J43 – NPar(2) coding – Octet 2

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set J43Npar(2)s – Octet 2
x x	x x x x x x	Remainder of attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set J43 (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.43 – Identification field – Relative power level/carrier for upstream carrier set B43c – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for upstream carrier set B43c Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for upstream carrier set B43c (Note).
NOTE – All carriers in the carrier set shall be transmitted at the same power level.		

Table 9.45 – Identification field – Relative power level/carrier for downstream carrier set B43c – NPar(2) coding

Bits 8 7	Bits 6 5 4 3 2 1	Relative power level/carrier for downstream carrier set B43c Npar(2)s
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (bits 6-1 × 0.5 dB) for downstream carrier set B43c (Note).
NOTE – This octet shall only be sent when all carriers in the carrier set are transmitted at the same power level.		

Table 9.47 – Identification field – Relative power level/carrier for upstream carrier set V43 – NPar(2) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for upstream carrier set V43 Npar(2)s – Octet 1
x x	0 0 0 0 0 x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for upstream carrier set V43 (Note) – (bit 7)
NOTE – All carriers in the carrier set shall be transmitted at the same power level. Valid values are 0 to 45.5 dB		

Table 9.47.1 – Identification field – Relative power level/carrier for upstream carrier set V43 – NPar(2) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for upstream carrier set V43 Npar(2)s – Octet 2
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for upstream carrier set V43 (Note) – (bits 6-1)
NOTE – All carriers in the carrier set shall be transmitted at the same power level. Valid values are 0 to 45.5 dB.		

Table 9.49 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 1
x x	0 0 0 0 0 x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 257 of set V43 (Note) – (bit 7)
NOTE – Carriers in the carrier set may be transmitted at different power levels. If this octet is sent, its value shall be identical to the value contained in Table 9.67, relative power level for downstream carrier with frequency index N = 257 (octet 1). Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.		

Table 9.49.1 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 2
x x	x x x x x x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 257 of set V43 (Note) – (bits 6-1)
NOTE – Carriers in the carrier set may be transmitted at different power levels. If this octet is sent, its value shall be identical to the value contained in Table 9.67.1, relative power level for downstream carrier with frequency index N = 257 (Octet 2). Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.		

Table 9.49.2 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 3

Bits								Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 383 of set V43 (Note) – (bit 7)

NOTE – Carriers in the carrier set may be transmitted at different power levels. If this octet is sent, its value shall be identical to the value contained in Table 9.73, relative power level for downstream carrier with frequency index N = 383 (Octet 1).

Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.

Table 9.49.3 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 4

Bits								Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 383 of set V43 (Note) – (bits 6-1)

NOTE – Carriers in the carrier set may be transmitted at different power levels. If this octet is sent, its value shall be identical to the value contained in Table 9.73.1, relative power level for downstream carrier with frequency index N = 383 (Octet 2).

Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.

Table 9.49.4 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 5

Bits								Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 511 of set V43 (Note) – (bit 7)

NOTE – Carriers in the carrier set may be transmitted at different power levels. If this octet is sent, its value shall be identical to the value contained in Table 9.75, relative power level for downstream carrier with frequency index N = 511 (Octet 1).

Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.

Table 9.49.5 – Identification field – Relative power level/carrier for downstream carrier set V43 – NPar(2) coding – Octet 6

Bits								Relative power level/carrier for downstream carrier set V43 Npar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit power per carrier relative to maximum power (in steps of 0.5 dB) for downstream carrier 511 of set V43 (Note) – (bits 6-1)

NOTE – Carriers in the carrier set may be transmitted at different power levels. . If this octet is sent, its value shall be identical to the value contained in Table 9.75.1, relative power level for downstream carrier with frequency index N = 511 (Octet 2).

Valid values are 0 to 58.5 dB and 59 to 63.5 as special values corresponding to carrier not transmitted.

Table 9.51 – Identification field – Relative power level for downstream carrier with frequency index N = 12 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 12 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 12 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.51.1 – Identification field – Relative power level for downstream carrier with frequency index N = 12 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 12 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 12 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.53 – Identification field – Relative power level for downstream carrier with frequency index N = 14 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 14 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 14 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.53.1 – Identification field – Relative power level for downstream carrier with frequency index N = 14 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 14 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 14 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.55 – Identification field – Relative power level for downstream carrier with frequency index N = 40 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 40 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 40 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.55.1 – Identification field – Relative power level for downstream carrier with frequency index N = 40 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 40 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 40 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.57 – Identification field – Relative power level for downstream carrier with frequency index N = 56 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 56 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 56 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.57.1 – Identification field – Relative power level for downstream carrier with frequency index N = 56 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 56 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 56 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.59 – Identification field – Relative power level for downstream carrier with frequency index N = 64 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 64 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 64 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.59.1 – Identification field – Relative power level for downstream carrier with frequency index N = 64 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 64 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 64 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.61 – Identification field – Relative power level for downstream carrier with frequency index N = 72 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 72 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 72 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.61.1 – Identification field – Relative power level for downstream carrier with frequency index N = 72 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 72 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 72 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.63 – Identification field – Relative power level for downstream carrier with frequency index N = 88 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 88 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 88 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.63.1 – Identification field – Relative power level for downstream carrier with frequency index N = 88 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 88 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 88 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.65 – Identification field – Relative power level for downstream carrier with frequency index N = 96 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 96 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 96 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.65.1 – Identification field – Relative power level for downstream carrier with frequency index N = 96 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 96 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 96 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.67 – Identification field – Relative power level for downstream carrier with frequency index N = 257 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 257 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 257 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.67.1 – Identification field – Relative power level for downstream carrier with frequency index N = 257 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 257 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 257 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.69 – Identification field – Relative power level for downstream carrier with frequency index N = 293 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 293 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 293 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.69.1 – Identification field – Relative power level for downstream carrier with frequency index N = 293 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 293 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 293 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.71 – Identification field – Relative power level for downstream carrier with frequency index N = 337 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 337 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 337 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.71.1 – Identification field – Relative power level for downstream carrier with frequency index N = 337 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 337 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 337 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.73 – Identification field – Relative power level for downstream carrier with frequency index N = 383 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 383 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 383 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.73.1 – Identification field – Relative power level for downstream carrier with frequency index N = 383 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 383 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 383 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.75 – Identification field – Relative power level for downstream carrier with frequency index N = 511 – NPar(2) coding – Octet 1

Bits								Relative power level for downstream carrier with frequency index N = 511 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 511 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.75.1 – Identification field – Relative power level for downstream carrier with frequency index N = 511 – NPar(2) coding – Octet 2

Bits								Relative power level for downstream carrier with frequency index N = 511 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –3.65 dBm (in steps of 0.5 dB) for downstream carrier 511 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-C and the receive level for an HSTU-R. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –131.15 dBm.

Table 9.77 – Identification field – Relative power level for upstream carrier with frequency index N = 7 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 7 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 7 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.77.1 – Identification field – Relative power level for upstream carrier with frequency index N = 7 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 7 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 7 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.79 – Identification field – Relative power level for upstream carrier with frequency index N = 9 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 9 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 9 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.79.1 – Identification field – Relative power level for upstream carrier with frequency index N = 9 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 9 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 9 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.81 – Identification field – Relative power level for upstream carrier with frequency index N = 17 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 17 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 17 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.81.1 – Identification field – Relative power level for upstream carrier with frequency index N = 17 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 17 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 17 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.83 – Identification field – Relative power level for upstream carrier with frequency index N = 25 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 25 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 25 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.83.1 – Identification field – Relative power level for upstream carrier with frequency index N = 25 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 25 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 25 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.85 – Identification field – Relative power level for upstream carrier with frequency index N = 37 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 37 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 37 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.85.1 – Identification field – Relative power level for upstream carrier with frequency index N = 37 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 37 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 37 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.87 – Identification field – Relative power level for upstream carrier with frequency index N = 45 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 45 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 45 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.87.1 – Identification field – Relative power level for upstream carrier with frequency index N = 45 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 45 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 45 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.89 – Identification field – Relative power level for upstream carrier with frequency index N = 53 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 53 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 53 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.89.1 – Identification field – Relative power level for upstream carrier with frequency index N = 53 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 53 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –1.65 dBm (in steps of 0.5 dB) for upstream carrier 53 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –129.15 dBm.

Table 9.91 – Identification field – Relative power level for upstream carrier with frequency index N = 944 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 944 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 944 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

Table 9.91.1 – Identification field – Relative power level for upstream carrier with frequency index N = 944 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 944 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 944 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

Table 9.93 – Identification field – Relative power level for upstream carrier with frequency index N = 972 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 972 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 972 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

Table 9.93.1 – Identification field – Relative power level for upstream carrier with frequency index N = 972 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 972 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 972 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

Table 9.95 – Identification field – Relative power level for upstream carrier with frequency index N = 999 – NPar(2) coding – Octet 1

Bits								Relative power level for upstream carrier with frequency index N = 999 – Npar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 999 – (bits 8 and 7)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

Table 9.95.1 – Identification field – Relative power level for upstream carrier with frequency index N = 999 – NPar(2) coding – Octet 2

Bits								Relative power level for upstream carrier with frequency index N = 999 – Npar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Attenuation in ITU-T G.994.1 transmit or receive power (Note) relative to –16.65 dBm (in steps of 0.5 dB) for upstream carrier 999 – (bits 6-1)

NOTE – Indicates the transmit level for an HSTU-R and the receive level for an HSTU-C. Valid values for transmit level are 0 to 58.5 dB. Valid values for receive level are 0 to 127 dB, with a value of 127.5 as a special value indicating a receive level ≤ –144.15 dBm.

9.4 Standard information field (S)

In the standard information field, the parameters represent modes of working or capabilities relating to the xTU-R or xTU-C.

The standard information field of CL, CLR, MP and MS messages is encoded in accordance with the rules described in clause 9.2. For MR, ACK, NAK and REQ messages, the standard information field is not used and is therefore of zero length.

The standard information field consists of a set of octets in which each capability is assigned a unique bit position. A binary ONE in the assigned bit position indicates that the capability is valid.

For messages CL and CLR, the validity of multiple capabilities may be conveyed by transmitting a binary ONE in each bit position corresponding to a valid capability. For messages MP and MS, multiple capabilities may be selected only if they can all be supported simultaneously within the xTU concerned.

The level 1 Pars for MP, MS, CL and CLR messages are listed below, beginning with Table 10. Lower level Pars follow, beginning with Table 11.1. The interpretation and use of these lower level Pars is defined in the respective xDSL Recommendations or other technical specifications.

Table 10 – Standard information field – NPar(1) coding

Bits								NPar(1)s
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Voiceband: V.8 (Note 1)
x	x	x	x	x	x	1	x	Voiceband: V.8 *bis* (Note 1)
x	x	x	x	x	1	x	x	Silent period (Note 2)
x	x	x	x	1	x	x	x	ITU-T G.997.1 (Note 3)
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	1	x	x	x	x	x	x	Reserved for allocation by ITU-T
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – Setting this bit to binary ONE in an MS message initiates the ITU-T G.994.1 session cleardown procedure specified in clause 11.3, and requests a V.8 or V.8 *bis* handshake in the voiceband, with the xTU-R taking on the role of a calling station and the xTU-C taking on the role of an answering station.

NOTE 2 – This bit shall be set to binary ONE in a CLR or CL message. Setting this bit to binary ONE in an MS message initiates the ITU-T G.994.1 session cleardown procedure specified in clause 11.3, and requests a silence period at the other transmitter of approximately 1 minute. The station that invoked the silent period by transmitting MS may terminate the silent period prior to the 1 minute by restarting an ITU-T G.994.1 session.

NOTE 3 – The use of this bit is for further study and shall be set to binary ZERO in CLR, CL and MS.

NOTE 1 – Coding rules of the codepoint table

The tables containing the codepoints are numbered in a hierarchical way to reflect the structure of the handshake codetree (order of transmission of the parameters). Each table is numbered with up to four indexes: $X_1.X_2.X_3.X_4$. Index X_1 is the index of the NPar(1) followed by SPar(1) (see Note 2), index X_2 is the interleaved index of NPar(2)s (odd values of X_2) and SPar(2)s (even values of X_2), and index X_3 is the index of NPar(3)s (for even non-zero X_2). If an NPar contains more than 1 octet, one additional index ".k" is appended to the tables referring to additional octet numbers k+1. If an SPar contains more than 1 octet, two additional indices in the format ".0.k" are appended to the tables referring to additional octet numbers k+1. For examples, the second octet of the third NPar(3) included in the second SPar(2) of the first standard information field SPar(1) is 11.4.3.1; the third octet of the first SPar(2) in the first standard information field SPar(1) is 11.2.0.2; the first octet of the second NPar(2) in the first standard information field SPar(1) is 11.3.

NOTE 2 – Currently, X_1 is even for NPar(1)s and odd for Spar(1)s for both identification fields and standard information fields.

Table 11 – Standard information field – SPar(1) coding – Octet 1

Bits								SPar(1)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.992.1 – Annex A (Note)
x	x	x	x	x	x	1	x	ITU-T G.992.1 – Annex B (Note)
x	x	x	x	x	1	x	x	ITU-T G.992.1 – Annex C (Note)
x	x	x	x	1	x	x	x	ITU-T G.992.2 – Annexes A/B (Note)
x	x	x	1	x	x	x	x	ITU-T G.992.2 – Annex C (Note)
x	x	1	x	x	x	x	x	ITU-T G.992.1 – Annex H (Note)
x	1	x	x	x	x	x	x	ITU-T G.992.1 – Annex I (Note)
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE – The spectrum information indicated in the NPar(3) fields associated with these Recommendations is of informative nature and does not imply any requirements on the transmit spectrum used during initialization and data mode. Regardless of the spectrum information, the transmit spectrum shall comply with their respective Recommendations. Spectrum information may only be included in a CLR or CL message, not in an MP or MS message. The spectrum information is coded in 8 bits (across 2 octets) as a binary representation of the subcarrier index.

– Maximum frequencies: up to and including the subcarrier index.
– Minimum frequencies: above and including the subcarrier index.

Table 11.0.1 – Standard information field – SPar(1) coding – Octet 2

Bits								SPar(1)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.991.2 – Annex A/F
x	x	x	x	x	x	1	x	ITU-T G.991.2 – Annex B/G
x	x	x	x	x	1	x	x	T1E1 trial-use MCM VDSL (Note 1)
x	x	x	x	1	x	x	x	T1E1 trial-use SCM VDSL (Note 2)
x	x	x	1	x	x	x	x	ETSI MCM VDSL (Note 3)
x	x	1	x	x	x	x	x	ETSI SCM VDSL (Note 3)
x	1	x	x	x	x	x	x	Reserved for allocation by ITU-T Committee T1 enchaned SHDSL
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – Use of this bit is defined in "Draft Trial-Use Standard For Telecommunication – Interface Between Networks and Customer Installation – Very High Bit-rate Digital Subscriber Line (VDSL) Metallic Interface – Part 3: Technical Specification for Multi-Carrier Modulation (MCM) Transceivers".

NOTE 2 – Use of this bit is defined in "Draft Trial-Use Standard For Telecommunication – Interface Between Networks and Customer Installation – Very High Bit-rate Digital Subscriber Line (VDSL) Metallic Interface – Part 2: Technical Specification for Single-Carrier Modulation (SCM) Transceivers".

NOTE 3 – Use of this bit is defined in ETSI TS 101270-2.

Table 11.0.2 – Standard information field – SPar(1) coding – Octet 3

Bits								SPar(1)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.992.3 – Annex A/L
x	x	x	x	x	x	1	x	ITU-T G.992.3 – Annex B
x	x	x	x	x	1	x	x	ITU-T G.992.3 – Annex I
x	x	x	x	1	x	x	x	ITU-T G.992.3 – Annex J
x	x	x	1	x	x	x	x	ITU-T G.992.4 – Annex A
x	x	1	x	x	x	x	x	ITU-T G.992.4 – Annex I
x	1	x	x	x	x	x	x	ITU-T G.992.3 – Annex C
x	0	0	0	0	0	0	0	No parameters in this octet

Table 11.0.3 – Standard information field – SPar(1) coding – Octet 4

Bits								SPar(1)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.992.5 – Annex A
x	x	x	x	x	x	1	x	ITU-T G.992.5 – Annex B
x	x	x	x	x	1	x	x	ITU-T G.992.5 – Annex I
x	x	x	x	1	x	x	x	ITU-T G.992.3 – Annex M
x	x	x	1	x	x	x	x	ITU-T G.992.5 Annex J
x	x	1	x	x	x	x	x	IEEE 802.3ah 2BASE-TL
x	1	x	x	x	x	x	x	IEEE 802.3ah 10PASS-TS
x	0	0	0	0	0	0	0	No parameters in this octet

Table 11.0.4 – Standard information field – SPar(1) coding – Octet 5

Bits								SPar(1)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.992.5 – Annex M
x	x	x	x	x	x	1	x	ITU-T G.993.1/ANSI T1.424
x	x	x	x	x	1	x	x	ITU-T G.993.1 – Annex I/T1E1 TRQ 12
x	x	x	x	1	x	x	x	Variable silence period (Note)
x	x	x	1	x	x	x	x	ITU-T G.992.5 Annex C
x	x	1	x	x	x	x	x	ITU-T G.993.2
x	1	x	x	x	x	x	x	ITU-T G.9701
x	0	0	0	0	0	0	0	No parameters in this octet

NOTE – Setting the bit to binary ONE in an MS message requests a silence period of 10-640 seconds long, as specified by the variable silence period length field. The station that has invoked the silence period by transmitting MS may terminate the silence period prior to the requested length, by restarting the handshake session (sending activation tones).

Table 11.0.5 – Standard information field – SPar(1) coding – Octet 6

Bits								SPar(1)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.9711
x	x	x	x	x	x	1	X	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	X	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	X	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	X	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	X	Reserved for allocation by ITU-T
x	1	x	x	x	x	x	x	Reserved for allocation by ITU-T
x	0	0	0	0	0	0	0	No parameters in this octet

9.4.1 ITU-T G.992.1 Annex A Par(2)/Par(3) parameters

Table 11.1 – Standard information field – ITU-T G.992.1 Annex A NPar(2) coding

Bits								ITU-T G.992.1 Annex A NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.2 – Standard information field – ITU-T G.992.1 Annex A SPar(2) coding

Bits								ITU-T G.992.1 Annex A SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Sub-channel information
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.2.1 – Standard information field – ITU-T G.992.1 Annex A sub-channel information NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex A sub-channel information NPar(3)s – Octet 1
x	x	x	x	x	x	x	1	AS0 downstream
x	x	x	x	x	x	1	x	AS1 downstream
x	x	x	x	x	1	x	x	AS2 downstream
x	x	x	x	1	x	x	x	AS3 downstream
x	x	x	1	x	x	x	x	LS0 downstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.2.1.1 – Standard information field – ITU-T G.992.1 Annex A sub-channel information NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex A sub-channel information NPar(3)s – Octet 2
x	x	x	x	x	x	x	1	LS1 downstream
x	x	x	x	x	x	1	x	LS2 downstream
x	x	x	x	x	1	x	x	LS0 upstream
x	x	x	x	1	x	x	x	LS1 upstream
x	x	x	1	x	x	x	x	LS2 upstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.2.2 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3)s – Octet 1
x	x	0	0	0	0	x	x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.2.2.1 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.2.2.2 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3)s – Octet 3
x	x	0	0	0	0	x	x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.2.2.3 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex A spectrum frequency upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.2.3 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.2.3.1 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.2.3.2 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.2.3.3 – Standard information field – ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex A spectrum frequency downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency downstream (bits 1 to 6)

9.4.2 ITU-T G.992.1 Annex B Par(2)/Par(3) parameters

Table 11.3 – Standard information field – ITU-T G.992.1 Annex B NPar(2) coding

Bits								ITU-T G.992.1 Annex B NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	Upstream tones 1 to 32
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.4 – Standard information field – ITU-T G.992.1 Annex B SPar(2) coding

Bits								ITU-T G.992.1 Annex B SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Sub-channel information
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.4.1 – Standard information field – ITU-T G.992.1 Annex B sub-channel information NPar(3) coding – Octet 1

Bits								ITU-T G.992.1 Annex B sub-channel information NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	AS0 downstream
x	x	x	x	x	x	1	x	AS1 downstream
x	x	x	x	x	1	x	x	AS2 downstream
x	x	x	x	1	x	x	x	AS3 downstream
x	x	x	1	x	x	x	x	LS0 downstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.4.1.1 – Standard information field – ITU-T G.992.1 Annex B sub-channel information NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex B sub-channel information NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	LS1 downstream
x	x	x	x	x	x	1	x	LS2 downstream
x	x	x	x	x	1	x	x	LS0 upstream
x	x	x	x	1	x	x	x	LS1 upstream
x	x	x	1	x	x	x	x	LS2 upstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.4.2 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.4.2.1 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.4.2.2 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.4.2.3 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex B spectrum frequency upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.4.3 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.4.3.1 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.4.3.2 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.1 Annex B spectrum frequency downstream Npar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.4.3.3 – Standard information field – ITU-T G.992.1 Annex B spectrum frequency downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex B spectrum frequency downstream Npar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency downstream (bits 1 to 6)

9.4.3 ITU-T G.992.1 Annex C Par(2)/Par(3) parameters

Table 11.5 – Standard information field – ITU-T G.992.1 Annex C NPar(2) coding – Octet 1

Bits								ITU-T G.992.1 Annex C NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	DBM
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.5.1 – Standard information field – ITU-T G.992.1 Annex C NPar(2) coding – Octet 2

Bits								ITU-T G.992.1 Annex C NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 1
x	x	x	x	x	x	1	x	Profile 2
x	x	x	x	x	1	x	x	Profile 3
x	x	x	x	1	x	x	x	Profile 4
x	x	x	1	x	x	x	x	Profile 5
x	x	1	x	x	x	x	x	Profile 6
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.6 – Standard information field – ITU-T G.992.1 Annex C SPar(2) coding

Bits								ITU-T G.992.1 Annex C SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Sub-channel information
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	C-PILOT
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.6.1 – Standard information field – ITU-T G.992.1 Annex C sub-channel information NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex C sub-channel information NPar(3)s – Octet 1
x	x	x	x	x	x	x	1	AS0 downstream
x	x	x	x	x	x	1	x	AS1 downstream
x	x	x	x	x	1	x	x	AS2 downstream
x	x	x	x	1	x	x	x	AS3 downstream
x	x	x	1	x	x	x	x	LS0 downstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.6.1.1 – Standard information field – ITU-T G.992.1 Annex C sub-channel information NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex C sub-channel information NPar(3)s – Octet 2
x	x	x	x	x	x	x	1	LS1 downstream
x	x	x	x	x	x	1	x	LS2 downstream
x	x	x	x	x	1	x	x	LS0 upstream
x	x	x	x	1	x	x	x	LS1 upstream
x	x	x	1	x	x	x	x	LS2 upstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.6.2 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3)s – Octet 1
x	x	0	0	0	0	x	x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.6.2.1 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.6.2.2 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3)s – Octet 3
x	x	0	0	0	0	x	x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.6.2.3 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C spectrum frequency upstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.6.3 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.6.3.1 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.6.3.2 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.6.3.3 – Standard information field – ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C spectrum frequency downstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency downstream (bits 1 to 6)

Table 11.6.4 – Standard information field – ITU-T G.992.1 Annex C C-PILOT NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex C C-PILOT NPar(3)s – Octet 1
x x	x x x x x 1	$n_{C\text{-}PILOT1}$ = 64
x x	x x x x 1 x	$n_{C\text{-}PILOT1}$ = 48
x x	x x x 1 x x	$n_{C\text{-}PILOT1}$ = 32
x x	x x 1 x x x	$n_{C\text{-}PILOT1}$ = 16
x x	x 1 x x x x	A_{48}/B_{48}
x x	1 x x x x x	C-REVERB33-63
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.6.4.1 – Standard information field – ITU-T G.992.1 Annex C C-PILOT NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex C C-PILOT NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	A_{24}/B_{24}
x	x	x	x	x	x	1	x	C-REVERB6-31
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

9.4.4 ITU-T G.992.2 Annexes A/B Par(2)/Par(3) parameters

Table 11.7 – Standard information field – ITU-T G.992.2 Annexes A/B NPar(2) coding

Bits								ITU-T G.992.2 Annexes A/B NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Fast retrain
x	x	x	1	x	x	x	x	RS16
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.8 – Standard information field – ITU-T G.992.2 Annexes A/B SPar(2) coding

Bits								ITU-T G.992.2 Annexes A/B SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.8.2 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3)s – Octet 1
x	x	0	0	0	0	x	x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.8.2.1 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.8.2.2 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3)s – Octet 3
x	x	0	0	0	0	x	x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.8.2.3 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.8.3 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3)s – Octet 1
x	x	0	0	0	0	x	x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.8.3.1 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.8.3.2 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3)s – Octet 3
x	x	0	0	0	0	x	x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.8.3.3 – Standard information field – ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.2 Annexes A/B spectrum frequency downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency downstream (bits 1 to 6)

9.4.5 ITU-T G.992.2 Annex C Par(2)/Par(3) parameters

Table 11.9 – Standard information field – ITU-T G.992.2 Annex C NPar(2) coding – Octet 1

Bits								ITU-T G.992.2 Annex C NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	DBM
x	x	x	x	1	x	x	x	Fast retrain
x	x	x	1	x	x	x	x	RS16
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.9.1 – Standard information field – ITU-T G.992.2 Annex C NPar(2) coding – Octet 2

Bits								ITU-T G.992.2 Annex C NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 1
x	x	x	x	x	x	1	x	Profile 2
x	x	x	x	x	1	x	x	Profile 3
x	x	x	x	1	x	x	x	Profile 4
x	x	x	1	x	x	x	x	Profile 5
x	x	1	x	x	x	x	x	Profile 6
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.10 – Standard information field – ITU-T G.992.2 Annex C SPar(2) coding

Bits								ITU-T G.992.2 Annex C SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	C-PILOT
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.10.2 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.10.2.1 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.10.2.2 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.10.2.3 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency upstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.10.3 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.10.3.1 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.10.3.2 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.10.3.3 – Standard information field – ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.2 Annex C spectrum frequency downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency downstream (bits 1 to 6)

Table 11.10.4 – Standard information field – ITU-T G.992.2 Annex C C-PILOT NPar(3) coding – Octet 1

Bits								ITU-T G.992.2 Annex C C-PILOT NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	$n_{C\text{-}PILOT1} = 64$
x	x	x	x	x	x	1	x	$n_{C\text{-}PILOT1} = 48$
x	x	x	x	x	1	x	x	$n_{C\text{-}PILOT1} = 32$
x	x	x	x	1	x	x	x	$n_{C\text{-}PILOT1} = 16$
x	x	x	1	x	x	x	x	A_{48}/B_{48}
x	x	1	x	x	x	x	x	C-REVERB33-63
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.10.4.1 – Standard information field – ITU-T G.992.2 Annex C C-PILOT NPar(3) coding – Octet 2

Bits								ITU-T G.992.2 Annex C C-PILOT NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	A_{24}/B_{24}
x	x	x	x	x	x	1	x	C-REVERB6-31
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

9.4.6 ITU-T G.992.1 Annex H Par(2)/Par(3) parameters

Table 11.11 – Standard information field – ITU-T G.992.1 Annex H NPar(2) coding

Bits								ITU-T G.992.1 Annex H NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EFT
x	x	x	x	x	x	1	x	Fast path
x	x	x	x	x	1	x	x	1.544 Mbit/s
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.12 – Standard information field – ITU-T G.992.1 Annex H SPar(2) coding

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H SPar(2)s
x x	x x x x x 1	Reserved for allocation by ITU-T
x x	x x x x 1 x	Spectrum frequency upstream
x x	x x x 1 x x	Spectrum frequency downstream
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.12.2 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.12.2.1 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.12.2.2 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.12.2.3 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H spectrum frequency upstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.12.3 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.12.3.1 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.12.3.2 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.12.3.3 – Standard information field – ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex H spectrum frequency downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Spectrum maximum frequency downstream (bits 1 to 6)

9.4.7 ITU-T G.992.1 Annex I Par(2)/Par(3) parameters

Table 11.13 – Standard information field – ITU-T G.992.1 Annex I NPar(2) coding – Octet 1

Bits								ITU-T G.992.1 Annex I NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	R-ACK1
x	x	x	x	x	x	1	x	R-ACK2
x	x	x	x	x	1	x	x	DBM
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.13.1 – Standard information field – ITU-T G.992.1 Annex I NPar(2) coding – Octet 2

Bits								ITU-T G.992.1 Annex I NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectral shaping downstream #1 (shaped ssvi)
x	x	x	x	x	x	1	x	Spectral shaping downstream #2 (flat ssvi)
x	x	x	x	x	1	x	x	Spectral shaping downstream #3 (ATU-C selected ssvi)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14 – Standard information field – ITU-T G.992.1 Annex I SPar(2) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I SPar(2)s
x	x	x	x	x	x	x	1	Sub-channel information
x	x	x	x	x	x	1	x	Spectrum frequency upstream
x	x	x	x	x	1	x	x	Spectrum frequency downstream
x	x	x	x	1	x	x	x	C-PILOT
x	x	x	1	x	x	x	x	Spectrum shaping downstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14.1 – Standard information field – ITU-T G.992.1 Annex I sub-channel information NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I sub-channel information NPar(3)s – Octet 1
x	x	x	x	x	x	x	1	AS0 downstream
x	x	x	x	x	x	1	x	AS1 downstream
x	x	x	x	x	1	x	x	AS2 downstream
x	x	x	x	1	x	x	x	AS3 downstream
x	x	x	1	x	x	x	x	LS0 downstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14.1.1 – Standard information field – ITU-T G.992.1 Annex I sub-channel information NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I sub-channel information NPar(3)s – Octet 2
x	x	x	x	x	x	x	1	LS1 downstream
x	x	x	x	x	x	1	x	LS2 downstream
x	x	x	x	x	1	x	x	LS0 upstream
x	x	x	x	1	x	x	x	LS1 upstream
x	x	x	1	x	x	x	x	LS2 upstream
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14.2 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3)s – Octet 1
x	x	0	0	0	0	x	x	Spectrum minimum frequency upstream (bits 7 and 8)

Table 11.14.2.1 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency upstream (bits 1 to 6)

Table 11.14.2.2 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency upstream (bits 7 and 8)

Table 11.14.2.3 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency upstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency upstream (bits 1 to 6)

Table 11.14.3 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3)s – Octet 1
x x	0 0 0 0 x x	Spectrum minimum frequency downstream (bits 7 and 8)

Table 11.14.3.1 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3)s – Octet 2
x x	x x x x x x	Spectrum minimum frequency downstream (bits 1 to 6)

Table 11.14.3.2 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3)s – Octet 3
x x	0 0 0 0 x x	Spectrum maximum frequency downstream (bits 7 and 8)

Table 11.14.3.3 – Standard information field – ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.1 Annex I spectrum frequency downstream NPar(3)s – Octet 4
x x	x x x x x x	Spectrum maximum frequency downstream (bits 1 to 6)

Table 11.14.4 – Standard information field – ITU-T G.992.1 Annex I C-PILOT NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I C-PILOT NPar(3)s – Octet 1
x	x	x	x	x	x	x	1	$n_{C\text{-}PILOT1}$ = 64
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	A_{48}/B_{48}
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14.4.1 – Standard information field – ITU-T G.992.1 Annex I C-PILOT NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I C-PILOT NPar(3)s – Octet 2
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	$n_{C\text{-}PILOT1}$ = 128
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.14.5 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.14.5.1 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.14.5.2 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 3
x	x	0	0	0	0	0	x	"First" log_ssv_i (bit 7)

Table 11.14.5.3 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_ssv_i (bits 6 to 1)

Table 11.14.5.4*(j-1) – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.14.5.4*(j-1)+1 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.14.5.4*(j-1)+2 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	"Last" log_ssv_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.14.5.4*(j-1)+3 – Standard information field – ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.1 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_ssv_i (bits 6 to 1)

9.4.8 ITU-T G.991.2 Annexes A/F Par(2)/Par(3) parameters

Table 11.15 – Standard information field – ITU-T G.991.2 Annexes A/F – NPar(2) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Training mode (Note) (see also Table 11.16)
x	x	x	x	x	x	1	x	PMMS mode (Note) (see also Table 11.16)
x	x	x	x	x	1	x	x	Regenerator silent period (Note)
x	x	x	x	1	x	x	x	4-Wire
x	x	x	1	x	x	x	x	SRU
x	x	1	x	x	x	x	x	Diagnostic mode
x	x	0	0	0	0	0	0	No parameters in this octet
NOTE – Only one of these bits shall be set at any given time.								

Table 11.15.1 – Standard information field – ITU-T G.991.2 Annexes A/F – NPar(2) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Warm-start enable
x	x	x	x	x	x	1	x	Central office regenerator target margin source
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16 – Standard information field – ITU-T G.991.2 Annexes A/F – SPar(2) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream training parameters
x	x	x	x	x	x	1	x	Upstream training parameters
x	x	x	x	x	1	x	x	Downstream PMMS parameters
x	x	x	x	1	x	x	x	Upstream PMMS parameters
x	x	x	1	x	x	x	x	TPS-TC parameters
x	x	1	x	x	x	x	x	Downstream framing parameters
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.0.1 – Standard information field – ITU-T G.991.2 Annexes A/F – SPar(2) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream framing parameters
x	x	x	x	x	x	1	x	Dual-mode TPS-TC parameters
x	x	x	x	x	1	x	x	Multiple-pair operation parameters
x	x	x	x	1	x	x	x	Downstream extended training rates – 16-TCPAM symmetric (Annex F)
x	x	x	1	x	x	x	x	Downstream extended training rates – 32-TCPAM symmetric (Annex F)
x	x	1	x	x	x	x	x	Upstream extended training rates – 16-TCPAM symmetric (Annex F)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.0.2 – Standard information field – ITU-T G.991.2 Annexes A/F – SPar(2) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream extended training rates – 32-TCPAM symmetric (Annex F)
x	x	x	x	x	x	1	x	Downstream extended PMMS rates (Annex F)
x	x	x	x	x	1	x	x	Upstream extended PMMS rates (Annex F)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.1.1 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.2 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.3 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.4 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.5 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.6 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.7 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 768 or 776 kbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.536 or 1.544 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.8 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream sub-data rate = 0 kbit/s
x	x	x	x	x	x	1	x	Downstream sub-data rate = 8 kbit/s
x	x	x	x	x	1	x	x	Downstream sub-data rate = 16 kbit/s
x	x	x	x	1	x	x	x	Downstream sub-data rate = 24 kbit/s
x	x	x	1	x	x	x	x	Downstream sub-data rate = 32 kbit/s
x	x	1	x	x	x	x	x	Downstream sub-data rate = 40 kbit/s
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.9 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream sub-data rate = 48 kbit/s
x	x	x	x	x	x	1	x	Downstream sub-data rate = 56 kbit/s
x	x	x	x	x	1	x	x	Downstream sub-data rate unspecified by terminal
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.1.10 – Standard information field – ITU-T G.991.2 Annexes A/F downstream training parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes A/F downstream training NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.2 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.2.1 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.2 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F A upstream training NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.3 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.4 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.5 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.6 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.7 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 768 or 776 kbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.536 or 1.544 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.8 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream sub-data rate = 0 kbit/s
x	x	x	x	x	x	1	x	Upstream sub-data rate = 8 kbit/s
x	x	x	x	x	1	x	x	Upstream sub-data rate = 16 kbit/s
x	x	x	x	1	x	x	x	Upstream sub-data rate = 24 kbit/s
x	x	x	1	x	x	x	x	Upstream sub-data rate = 32 kbit/s
x	x	1	x	x	x	x	x	Upstream sub-data rate = 40 kbit/s
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.9 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream sub-data rate = 48 kbit/s
x	x	x	x	x	x	1	x	Upstream sub-data rate = 56 kbit/s
x	x	x	x	x	1	x	x	Upstream sub-data rate unspecified by terminal
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.2.10 – Standard information field – ITU-T G.991.2 Annexes A/F upstream training parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes A/F upstream training NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.3 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.3.1 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Transmit silence
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.2 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.3 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.4 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.5 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.6 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.7 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 768 kbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.544 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.3.8 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	1	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.16.3.9 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.16.3.10 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Downstream PMMS duration unspecified by terminal
x	x	x	x	x	x	x	x	Downstream PMMS duration (bits 6-1 × 50 ms)
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T

Table 11.16.3.11 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 12

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 12
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Downstream PMMS scrambler polynomial index (i2, i1, i0)

Table 11.16.3.12 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 13

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 13
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Worst-case PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Worst-case PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.16.3.13 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 14

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 14
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Current-condition PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Current-condition PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.16.3.14 – Standard information field – ITU-T G.991.2 Annexes A/F downstream PMMS parameters – NPar(3) coding – Octet 15

Bits								ITU-T G.991.2 Annexes A/F downstream PMMS NPar(3)s – Octet 15
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.4 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.4.1 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Transmit silence
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.2 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 3
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Upstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.3 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 4
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Upstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.4 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 5
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.5 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.6 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.7 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 768 kbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.544 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.4.8 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	1	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.16.4.9 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.16.4.10 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Upstream PMMS duration unspecified by terminal
x	x	x	x	x	x	x	x	Upstream PMMS duration (bits 6-1 × 50 ms)
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T

Table 11.16.4.11 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 12

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 12
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Upstream PMMS scrambler polynomial index (i2, i1, i0)

Table 11.16.4.12 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 13

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 13
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Worst-case PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Worst-case PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.16.4.13 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 14

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 14
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Current-condition PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Current-condition PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.16.4.14 – Standard information field – ITU-T G.991.2 Annexes A/F upstream PMMS parameters – NPar(3) coding – Octet 15

Bits								ITU-T G.991.2 Annexes A/F upstream PMMS NPar(3)s – Octet 15
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.16.5 – Standard information field – ITU-T G.991.2 Annexes A/F TPS-TC parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F TPS-TC parameter NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Clock mode 1
x	x	x	x	x	x	1	x	Clock mode 2
x	x	x	x	x	1	x	x	Clock mode 3a
x	x	x	x	1	x	x	x	Clock mode 3b
x	x	x	1	x	x	x	x	Low latency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.5.1 – Standard information field – ITU-T G.991.2 Annexes A/F TPS-TC parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F TPS-TC parameter NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Clear channel
x	x	x	x	x	x	1	x	Clear channel byte-oriented
x	x	x	x	x	1	x	x	Unaligned DS1
x	x	x	x	1	x	x	x	Aligned DS1/fractional DS1
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	Synchronous ISDN-BRA
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.5.2 – Standard information field – ITU-T G.991.2 Annexes A/F TPS-TC parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F TPS-TC parameter NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x				x	x	x	Number of ISDN BRA (0 to 6)
x	x	x	x	x				Z-bits used for ISDN BRA signalling (0 to 7)

Table 11.16.5.3 – Standard information field – ITU-T G.991.2 Annexes A/F TPS-TC parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F TPS-TC parameter NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	PTM (HDLC-based)
x	x	x	x	x	x	1	x	STM with DSC
x	x	x	x	x	1	x	x	LAPV5 enveloped POTS or ISDN
x	x	x	x	1	x	x	x	TU-12
x	x	x	1	x	x	x	x	PTM (64/65-octet-based)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.5.4 – Standard information field – ITU-T G.991.2 Annexes A/F TPS-TC parameters – NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F TPS-TC parameter NPar(3)s – Octet 5
x	x	x	x	x	x	x	1	Pre-emption (64/65B-based PTM)
x	x	x	x	x	x	1	x	Short packets (64/65-octet-based PTM)
x	x	x	x	x	1	x	x	CRC type (64/65-octet-based PTM)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.6 – Standard information field – ITU-T G.991.2 Annexes A/F downstream framing parameters – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F downstream framing parameter NPar(3)s – Octet 1
x	x					x	x	Sync word (bits 14 and 13)
		x	x	x	x			Stuff bits (bits 1 to 4)

Table 11.16.6.1 – Standard information field – ITU-T G.991.2 Annexes A/F downstream framing parameters – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F downstream framing parameter NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Sync word (bits 12 to 7)

Table 11.16.6.2 – Standard information field – ITU-T G.991.2 Annexes A/F downstream framing parameters – NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F downstream framing parameter NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Sync word (bits 6 to 1)

Table 11.16.7 – Standard information field – ITU-T G.991.2 Annexes A/F upstream framing parameters – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F upstream framing parameter NPar(3)s – Octet 1
x	x					x	x	Sync word (bits 14 and 13)
		x	x	x	x			Stuff bits (bits 1 to 4)

Table 11.16.7.1 – Standard information field – ITU-T G.991.2 Annexes A/F upstream framing parameters – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F upstream framing parameter NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Sync word (bits 12 to 7)

Table 11.16.7.2 – Standard information field – ITU-T G.991.2 Annexes A/F upstream framing parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F upstream framing parameter NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Sync word (bits 6 to 1)

Table 11.16.8 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	TPS-TC_a data rate – $n \times 64$ kbit/s (1 to 36)
x	x	1	1	1	1	1	1	TPS-TC_a data rate unspecified by terminal

Table 11.16.8.1 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	TPS-TC_a sub data rate – $i \times 8$ kbit/s (0 to 7)
x	x	1	1	1	1	1	1	TPS-TC_a sub-data rate unspecified by terminal (values of bits 6-1 from 8 to 62 reserved for allocation by ITU-T)

Table 11.16.8.2 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 1 – TPS-TC_b: Clear channel
x	x	x	x	x	x	1	x	Type 1 – TPS-TC_b: Clear channel byte-oriented
x	x	x	x	x	1	x	x	Type 1 – TPS-TC_b: Unaligned DS1
x	x	x	x	1	x	x	x	Type 1 – TPS-TC_b: Aligned DS1/fractional DS1
x	x	x	1	x	x	x	x	Type 1 – TPS-TC_b: ATM
x	x	1	x	x	x	x	x	Type 1 – TPS-TC_b: PTM (HDLC-based)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.8.3 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	Number of ISDN BRA (0 to 6)
		x	x	x				Z-bits used for ISDN BRA signalling (0 to 7)

Table 11.16.8.4 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 2 – TPS-TC$_a$: Unaligned DS1
x	x	x	x	x	x	1	x	Type 2 – TPS-TC$_a$: Aligned DS1/fractional DS1
x	x	x	x	x	1	x	x	Type 2 – TPS-TC$_b$: ATM
x	x	x	x	1	x	x	x	Type 2 – TPS-TC$_b$: PTM (HDLC-based)
x	x	x	1	x	x	x	x	Type 2 – TPS-TC$_b$: PTM (64/65-octet-based)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.8.5 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 3 – TPS-TC$_a$: Unaligned DS1
x	x	x	x	x	x	1	x	Type 3 – TPS-TC$_a$: Aligned DS1/fractional DS1
x	x	x	x	x	1	x	x	Type 3 – TPS-TC$_b$: Clear channel
x	x	x	x	1	x	x	x	Type 3 – TPS-TC$_b$: Clear channel byte-oriented
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.8.6 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 1 – TPS-TC$_a$: ISDN BRA
x	x	x	x	x	x	1	x	Type 1 – TPS-TC$_a$: STM with DSC
x	x	x	x	x	1	x	x	Type 1 – TPS-TC$_a$: LAPV5 enveloped POTS or ISDN
x	x	x	x	1	x	x	x	Type 1 – TPS-TC$_a$: TU-12
x	x	x	1	x	x	x	x	Type 1 – TPS-TC$_b$: PTM (64/65-octet-based)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.8.7 – Standard information field – ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameters – NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F dual mode TPS-TC parameter Npar(3)s – Octet 8
x	x					x	x	DRR support: 01 DRR not supported 10 DRR supported, STU-C DRR master 11 DRR supported, STU-R DRR master
x	x	x	x	x	x			Lead time (in SHDSL frames) count = bits 6-2 (supported values = 1 to 15)
x	x	0	0	0	0	0	0	DRR support and lead time unspecified by terminal

Table 11.16.8.8 – Standard information field – ITU-T G.991.2 Annex A dual mode TPS-TC parameters – NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex A dual mode TPS-TC parameter NPar(3)s – Octet 9
x	x	x	x	x	x	x	1	Pre-emption (64/65-octet-based PTM)
x	x	x	x	x	x	1	x	Short packets (64/65-octet-based PTM)
x	x	x	x	x	1	x	x	CRC type (64/65-octet-based PTM)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.16.9 – Standard information field – ITU-T G.991.2 Annexes A/F multiple-pair operation parameters – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes A/F multiple-pair operation parameters NPar(3)s – Octet 1
x	x					x	x	*M*-pair count (count = bits 2-1 + 1)
x	x	x	x	x	x			Reserved for allocation by ITU-T

Table 11.16.10 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric – NPar(3)s – Octet 1
x	x						x	Downstream base data rate – Minimum 1 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Downstream base data rate – Maximum 1 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Downstream base data rate – Step 1 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.10.1 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Downstream base data rate – Minimum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.10.2 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Downstream base data rate – Maximum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.10.3 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Downstream base data rate – Step 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

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Table 11.16.10.j_1*4-4 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-3
x	x						x	Downstream base data rate extension – Minimum j_1 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Downstream base data rate extension – Maximum j_1 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Downstream base data rate extension – Step j_1 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.10.j_1*4-3 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-2

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Minimum j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.10.j_1*4-2 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-1

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Maximum j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.10.j_1*4-1 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Step j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.11 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Downstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.11.1 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.11.2 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.11.3 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

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Table 11.16.11.j_2*4-4 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-3

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-3
8	7	6	5	4	3	2	1	
x	x						x	Downstream base data rate extension – Minimum j_2 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate extension – Maximum j_2 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate extension – Step j_2 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.11.j_2*4-3 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-2

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Minimum j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.11.j_2*4-2 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-1

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Maximum j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.11.j_2*4-1 – Standard information field – ITU-T G.991.2 Annex F downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4

Bits								ITU-T G.991.2 Annex F downstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Step j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.12 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.12.1 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Minimum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.12.2 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Maximum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.12.3 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Step 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

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Table 11.16.12.j_3*4-4 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-3

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-3
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate extension – Minimum j_3 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Upstream base data rate extension – Maximum j_3 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Upstream base data rate extension – Step j_3 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.12.j_3*4-3 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-2

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Minimum j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.12.j_3*4-2 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-1

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Maximum j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.12.j_3*4-1 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Step j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.13 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.13.1 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.13.2 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

Table 11.16.13.3 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.								

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Table 11.16.13.j_4*4-4 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-3

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-3
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate extension – Minimum j_4 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate extension – Maximum j_4 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate extension – Step j_4 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.13.j_4*4-3 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-2

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Minimum j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.13.j_4*4-2 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-1

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Maximum j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.13.j_4*4-1 – Standard information field – ITU-T G.991.2 Annex F upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4

Bits								ITU-T G.991.2 Annex F upstream extended training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Step j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.14 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Downstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for use by ITU-T

Table 11.16.14.1 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.14.2 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet 3
x x	x x x x x x	Downstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.		

Table 11.16.14.3 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet 4
x x	x x x x x x	Downstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.		

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Table 11.16.14.j_5*4-4 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet j_5*4-3
x x	1	Downstream base data rate extension – Minimum j_5 (bit 7), 32-TCPAM symmetric PSD
x x	2	Downstream base data rate extension – Maximum j_5 (bit 7), 32-TCPAM symmetric PSD
x x	3	Downstream base data rate extension – Step j_5 (bit 7), 32-TCPAM symmetric PSD
x x	x x x	Reserved for allocation by ITU-T

Table 11.16.14.j_5*4-3 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet j_5*4-2
x x	x x x x x x	Downstream base data rate extension –Minimum j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.		

Table 11.16.14.j_5*4-2 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-1

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet j_5*4-1
x x	x x x x x x	Downstream base data rate extension –Maximum j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.		

Table 11.16.14.j_5*4-1 – Standard information field – ITU-T G.991.2 Annex F downstream extended PMMS rates – NPar(3) coding – Octet j_5*4

Bits								ITU-T G.991.2 Annex F downstream extended PMMS rate NPar(3)s – Octet j_5*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Step j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.15 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for use by ITU-T

Table 11.16.15.1 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.15.2 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.15.3 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

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Table 11.16.15.j_6*4-4 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-3

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet j_6*4-3
8	7	6	5	4	3	2	1	
x	x						x	Upstream base data rate extension – Minimum j_6 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate extension – Maximum j_6 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate extension – Step j_6 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.16.15.j_6*4-3 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-2

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet j_6*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Minimum j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.15.j_6*4-2 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-1

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet j_6*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Maximum j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

Table 11.16.15.j_6*4-1 – Standard information field – ITU-T G.991.2 Annex F upstream extended PMMS rates – NPar(3) coding – Octet j_6*4

Bits								ITU-T G.991.2 Annex F upstream extended PMMS rate NPar(3)s – Octet j_6*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Upstream base data rate extension – Step j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6 bits in this octet to create a 7-bit number.

9.4.9 ITU-T G.991.2 Annexes B/G Par(2)/Par(3) parameters

Table 11.17 – Standard information field – ITU-T G.991.2 Annexes B/G – NPar(2) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Training mode (Note) (see also Table 11.18)
x	x	x	x	x	x	1	x	PMMS mode (Note) (see also Table 11.18)
x	x	x	x	x	1	x	x	Regenerator silent period (Note)
x	x	x	x	1	x	x	x	4-Wire
x	x	x	1	x	x	x	x	SRU
x	x	1	x	x	x	x	x	Diagnostic mode
x	x	0	0	0	0	0	0	No parameters in this octet
NOTE – Only one of these bits shall be set at any given time.								

Table 11.17.1 – Standard information field – ITU-T G.991.2 Annexes B/G – NPar(2) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Warm-start enable
x	x	x	x	x	x	1	x	Central office regenerator target margin source
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18 – Standard information field – ITU-T G.991.2 Annexes B/G – SPar(2) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream training parameters
x	x	x	x	x	x	1	x	Upstream training parameters
x	x	x	x	x	1	x	x	Downstream PMMS parameters
x	x	x	x	1	x	x	x	Upstream PMMS parameters
x	x	x	1	x	x	x	x	TPS-TC parameters
x	x	1	x	x	x	x	x	Downstream framing parameters
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.0.1 – Standard information field – ITU-T G.991.2 Annexes B/G – SPar(2) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream framing parameters
x	x	x	x	x	x	1	x	Dual-mode TPS-TC parameters
x	x	x	x	x	1	x	x	Multiple-pair operation parameters
x	x	x	x	1	x	x	x	Downstream extended training rates – 16-TCPAM symmetric (Annex G)
x	x	x	1	x	x	x	x	Downstream extended training rates – 32-TCPAM symmetric (Annex G)
x	x	1	x	x	x	x	x	Upstream extended training rates – 16-TCPAM symmetric (Annex G)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.0.2 – Standard information field – ITU-T G.991.2 Annexes B/G – SPar(2) coding – Octet 3

Bits								ITU-T G.991.2 Annexes B/G SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream extended training rates – 32-TCPAM symmetric (Annex G)
x	x	x	x	x	x	1	x	Downstream extended PMMS rates (Annex G)
x	x	x	x	x	1	x	x	Upstream extended PMMS rates (Annex G)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.1.1 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.2 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.3 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.4 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.5 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.6 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.7 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 2.304 Mbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.048 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.8 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream sub-data rate = 0 kbit/s
x	x	x	x	x	x	1	x	Downstream sub-data rate = 8 kbit/s
x	x	x	x	x	1	x	x	Downstream sub-data rate = 16 kbit/s
x	x	x	x	1	x	x	x	Downstream sub-data rate = 24 kbit/s
x	x	x	1	x	x	x	x	Downstream sub-data rate = 32 kbit/s
x	x	1	x	x	x	x	x	Downstream sub-data rate = 40 kbit/s
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.9 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream sub-data rate = 48 kbit/s
x	x	x	x	x	x	1	x	Downstream sub-data rate = 56 kbit/s
x	x	x	x	x	1	x	x	Downstream sub-data rate unspecified by terminal
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.1.10 – Standard information field – ITU-T G.991.2 Annexes B/G downstream training parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes B/G downstream training NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.2 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.2.1 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.2 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.3 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.4 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.5 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.6 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.7 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 2.304 Mbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.048 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.8 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream sub-data rate = 0 kbit/s
x	x	x	x	x	x	1	x	Upstream sub-data rate = 8 kbit/s
x	x	x	x	x	1	x	x	Upstream sub-data rate = 16 kbit/s
x	x	x	x	1	x	x	x	Upstream sub-data rate = 24 kbit/s
x	x	x	1	x	x	x	x	Upstream sub-data rate = 32 kbit/s
x	x	1	x	x	x	x	x	Upstream sub-data rate = 40 kbit/s
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.9 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes B upstream training NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream sub-data rate = 48 kbit/s
x	x	x	x	x	x	1	x	Upstream sub-data rate = 56 kbit/s
x	x	x	x	x	1	x	x	Upstream sub-data rate unspecified by terminal
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.2.10 – Standard information field – ITU-T G.991.2 Annexes B/G upstream training parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes B/G upstream training NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.3 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.3.1 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex B/G downstream PMMS NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Transmit silence
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.2 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex B/G downstream PMMS NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.3 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.4 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.5 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.6 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Downstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Downstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Downstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.7 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Downstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Downstream base data rate = 2.304 Mbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Downstream base data rate = 2.048 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.3.8 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	1	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.18.3.9 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.18.3.10 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Downstream PMMS duration unspecified by terminal
x	x	x	x	x	x	x	x	Downstream PMMS duration (bits 6-1 × 50 ms)
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T

Table 11.18.3.11 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 12

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 12
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Downstream PMMS scrambler polynomial index (i2, i1, i0)

Table 11.18.3.12 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 13

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 13
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Worst-case PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Worst-case PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.18.3.13 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 14

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 14
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Current-condition PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Current-condition PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.18.3.14 – Standard information field – ITU-T G.991.2 Annexes B/G downstream PMMS parameters – NPar(3) coding – Octet 15

Bits								ITU-T G.991.2 Annexes B/G downstream PMMS NPar(3)s – Octet 15
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Downstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.4 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-1: Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.4.1 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate unspecified by terminal
x	x	x	x	x	x	1	x	Transmit silence
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 192 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 256 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.2 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 320 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 384 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 448 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 512 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 576 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 640 kbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.3 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 704 kbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 768 kbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 832 kbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 896 kbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 960 kbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.024 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.4 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.088 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.152 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.216 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.280 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.344 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.408 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.5 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.472 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.536 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.600 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 1.664 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 1.728 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 1.792 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.6 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 1.856 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 1.920 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Upstream base data rate = 1.984 Mbit/s, symmetric PSD
x	x	x	x	1	x	x	x	Upstream base data rate = 2.048 Mbit/s, symmetric PSD
x	x	x	1	x	x	x	x	Upstream base data rate = 2.112 Mbit/s, symmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.176 Mbit/s, symmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.7 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 8

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream base data rate = 2.240 Mbit/s, symmetric PSD
x	x	x	x	x	x	1	x	Upstream base data rate = 2.304 Mbit/s, symmetric PSD
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Upstream base data rate = 2.304 Mbit/s, asymmetric PSD
x	x	1	x	x	x	x	x	Upstream base data rate = 2.048 Mbit/s, asymmetric PSD
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.4.8 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 9

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	1	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.18.4.9 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 10

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Fixed value during PMMS (all other values reserved for allocation by ITU-T)

Table 11.18.4.10 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 11

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	0	Upstream PMMS duration unspecified by terminal
x	x	x	x	x	x	x	x	Upstream PMMS duration (bits 6-1 × 50 ms)
x	x	1	1	1	1	1	1	Reserved for allocation by ITU-T

Table 11.18.4.11 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 12

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 12
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Upstream PMMS scrambler polynomial index (i2, i1, i0)

Table 11.18.4.12 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 13

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 13
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Worst-case PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Worst-case PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.18.4.13 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 14

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 14
8	7	6	5	4	3	2	1	
x	x	1	x	x	x	x	x	Current-condition PMMS target margin (dB) (bits 5-1 × 1.0 dB – 10 dB)
x	x	0	0	0	0	0	0	Current-condition PMMS target margin unspecified by terminal (values of bits 6-1 from 1 to 31 reserved for allocation by ITU-T)

Table 11.18.4.14 – Standard information field – ITU-T G.991.2 Annexes B/G upstream PMMS parameters – NPar(3) coding – Octet 15

Bits								ITU-T G.991.2 Annexes B/G upstream PMMS NPar(3)s – Octet 15
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	PBO-2 (4-wire/m-pair): Upstream PBO (dB) (bits 5-1 × 1.0 dB)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T

Table 11.18.5 – Standard information field – ITU-T G.991.2 Annexes B/G TPS-TC parameters – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annexes B/G TPS-TC parameter NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Clock mode 1
x	x	x	x	x	x	1	x	Clock mode 2
x	x	x	x	x	1	x	x	Clock mode 3a
x	x	x	x	1	x	x	x	Clock mode 3b
x	x	x	1	x	x	x	x	Low latency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.5.1 – Standard information field – ITU-T G.991.2 Annexes B/G TPS-TC parameters – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annexes B/G TPS-TC parameter NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Clear channel
x	x	x	x	x	x	1	x	Clear channel byte-oriented
x	x	x	x	x	1	x	x	Unaligned D2048S
x	x	x	x	1	x	x	x	Aligned D2048S/fractional D2048S
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	Unaligned D2048U
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.5.2 – Standard information field – ITU-T G.991.2 Annexes B/G TPS-TC parameters – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annexes B/G TPS-TC parameter NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Synchronous ISDN-BRA
x	x	x	x	x	x	1	x	PTM (HDLC-based)
x	x	x	x	x	1	x	x	STM with DSC
x	x	x	x	1	x	x	x	LAPV5 enveloped POTS or ISDN
x	x	x	1	x	x	x	x	TU-12
x	x	1	x	x	x	x	x	PTM (64/65-octet-based)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.5.3 – Standard information field – ITU-T G.991.2 Annexes B/G TPS-TC parameters – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annexes B/G TPS-TC parameter NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	Number of ISDN BRA (0 to 6)
		x	x	x				Z-bits used for ISDN BRA Signalling (0 to 7)

Table 11.18.5.4 – Standard information field – ITU-T G.991.2 Annexes B/G TPS-TC parameters – NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G TPS-TC parameter NPar(3)s – Octet 5
x	x	x	x	x	x	x	1	Pre-emption (64/65-octet-based PTM)
x	x	x	x	x	x	1	x	Short packets (64/65-octet-based PTM)
x	x	x	x	x	1	x	x	CRC type (64/65-octet-based PTM)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.6 – Standard information field – ITU-T G.991.2 Annexes B/G downstream framing parameters NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G downstream framing parameter NPar(3)s – Octet 1
x	x					x	x	Sync word (bits 14 and 13)
		x	x	x	x			Stuff bits (bits 1 to 4)

Table 11.18.6.1 – Standard information field – ITU-T G.991.2 Annexes B/G downstream framing parameters NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G downstream framing parameter NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Sync word (bits 12 to 7)

Table 11.18.6.2 – Standard information field – ITU-T G.991.2 Annexes B/G downstream framing parameters NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G downstream framing parameter NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Sync word (bits 6 to 1)

Table 11.18.7 – Standard information field – ITU-T G.991.2 Annexes B/G upstream framing parameters NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G upstream framing parameter NPar(3)s – Octet 1
x	x					x	x	Sync word (bits 14 and 13)
		x	x	x	x			Stuff bits (bits 1 to 4)

Table 11.18.7.1 – Standard information field – ITU-T G.991.2 Annexes B/G upstream framing parameters NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G upstream framing parameter NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Sync word (bits 12 to 7)

Table 11.18.7.2 – Standard information field – ITU-T G.991.2 Annexes B/G upstream framing parameters NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G upstream framing parameter NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Sync word (bits 6 to 1)

Table 11.18.8 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter Npar(3)s – Octet 1
x	x	x	x	x	x	x	x	TPS-TC_a data rate – $n \times 64$ kbit/s (1 to 36)
x	x	1	1	1	1	1	1	TPS-TC_a sub-data rate unspecified by terminal

Table 11.18.8.1 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter Npar(3)s – Octet 2
x	x	0	0	0	x	x	x	TPS-TC_a sub-data rate – $i \times 8$ kbit/s (0 to 7)
x	x	1	1	1	1	1	1	TPS-TC_a sub-data rate unspecified by terminal (values of bits 6-1 from 8 to 62 reserved for allocation by ITU-T)

Table 11.18.8.2 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 3
x	x	x	x	x	x	x	1	Type 1 – TPS-TC_b: Clear channel
x	x	x	x	x	x	1	x	Type 1 – TPS-TC_b: Clear channel byte-oriented
x	x	x	x	x	1	x	x	Type 1 – TPS-TC_b: Unaligned D2048U
x	x	x	x	1	x	x	x	Type 1 – TPS-TC_b: Unaligned D2048S
x	x	x	1	x	x	x	x	Type 1 – TPS-TC_b: Aligned D2048S/fractional D2048S
x	x	1	x	x	x	x	x	Type 1 – TPS-TC_b: ATM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.8.3 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter Npar(3)s – Octet 4
x	x				x	x	x	Number of ISDN BRA (0 to 6)
		x	x	x				Z-bits used for ISDN BRA signalling (0 to 7)

Table 11.18.8.4 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 5

Bits								ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 2 – TPS-TC$_a$: Unaligned D2048U
x	x	x	x	x	x	1	x	Type 2 – TPS-TC$_a$: Unaligned D2048S
x	x	x	x	x	1	x	x	Type 2 – TPS-TC$_a$: Aligned D2048S/fractional D2048S
x	x	x	x	1	x	x	x	Type 2 – TPS-TC$_a$: Synchronous ISDN BRA
x	x	x	1	x	x	x	x	Type 2 – TPS-TC$_b$: ATM (HDLC-based)
x	x	1	x	x	x	x	x	Type 2 – TPS-TC$_b$: PTM (HDLC-based)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.8.5 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 6

Bits								ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 3 – TPS-TC$_a$: Unaligned D2048U
x	x	x	x	x	x	1	x	Type 3 – TPS-TC$_a$: Unaligned D2048S
x	x	x	x	x	1	x	x	Type 3 – TPS-TC$_a$: Aligned D2048S/fractional D2048S
x	x	x	x	1	x	x	x	Type 3 – TPS-TC$_a$: Synchronous ISDN BRA
x	x	x	1	x	x	x	x	Type 3 – TPS-TC$_b$: Clear channel
x	x	1	x	x	x	x	x	Type 3 – TPS-TC$_b$: Clear channel byte-oriented
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.8.6 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 7

Bits								ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Type 1 – TPS-TC$_b$: PTM (HDLC-based)
x	x	x	x	x	x	1	x	Type 1 – TPS-TC$_a$: STM with DSC
x	x	x	x	x	1	x	x	Type 1 – TPS-TC$_a$: LAPV5 enveloped POTS or ISDN
x	x	x	x	1	x	x	x	Type 1 – TPS-TC$_a$: TU-12
x	x	x	1	x	x	x	x	Type 1 – TPS-TC$_b$: PTM (64/65-octet-based)
x	x	1	x	x	x	x	x	Type 2 – TPS-TC$_b$: PTM (64/65-octet-based)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.8.7 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 8
x	x					x	x	DRR Support: 01 DRR not supported 10 DRR supported, STU-C DRR master 11 DRR supported, STU-R DRR master
x	x	x	x	x	x			Lead time (in frames) count = bits 6-2 (supported values = 1 to 15)
x	x	0	0	0	0	0	0	DRR support and lead time unspecified by terminal

Table 11.18.8.8 – Standard information field – ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameters – NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annexes B/G dual mode TPS-TC parameter NPar(3)s – Octet 9
x	x	x	x	x	x	x	1	Pre-emption (64/65-octet-based PTM)
x	x	x	x	x	x	1	x	Short packets (64/65-octet-based PTM)
x	x	x	x	x	1	x	x	CRC type (64/65-octet-based PTM)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.18.9 – Standard information field – ITU-T G.991.2 Annex B/G multiple-pair operation parameters – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex B/G multiple-pair operation parameters NPar(3)s – Octet 1
x	x					x	x	*M*-pair count (count = bits 2-1 + 1)
		x	x	x	x			Reserved for allocation by ITU-T

Table 11.18.10 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 1
x	x						x	Downstream base data rate – Minimum 1 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Downstream base data rate – Maximum 1 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Downstream base data rate – Step 1 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.10.1 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream extended training rate – 16-TCPAM symmetric NPar(3)s – Octet 2
x x	x x x x x x	Downstream base data rate – Minimum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.10.2 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 3
x x	x x x x x x	Downstream base data rate – Maximum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.10.3 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 4
x x	x x x x x x	Downstream base data rate – Step 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

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Table 11.18.10.j_1*4-4 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-3
x x	x	Downstream base data rate extension – Minimum j_1 (bit 7), 16-TCPAM symmetric PSD
x x	x	Downstream base data rate extension – Maximum j_1 (bit 7), 16-TCPAM symmetric PSD
x x	x	Downstream base data rate extension – Step j_1 (bit 7), 16-TCPAM symmetric PSD
x x	x x x	Reserved for allocation by ITU-T

Table 11.18.10.j_1*4-3 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-2
x x	x x x x x x	Downstream base data rate extension – Minimum j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.10.j_1*4-2 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4-1

Bits								ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Maximum j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.10.j_1*4-1 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_1*4

Bits								ITU-T G.991.2 Annex G downstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_1*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Step j_1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.11 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 1

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	Downstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.11.1 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 2

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.11.2 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 3

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.11.3 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 4

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

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Table 11.18.11.j_2*4-4 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-3

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-3
8	7	6	5	4	3	2	1	
x	x						x	Downstream base data rate extension – Minimum j_2 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate extension – Maximum j_2 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate extension – Step j_2 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.11.j_2*4-3 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-2

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Minimum j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.11.j_2*4-2 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4-1

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4-1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Maximum j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.11.j_2*4-1 – Standard information field – ITU-T G.991.2 Annex G downstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_2*4

Bits								ITU-T G.991.2 Annex G downstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_2*4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Downstream base data rate extension – Step j_2 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.12 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 1
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.12.1 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Upstream base data rate – Minimum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.12.2 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Upstream base data rate – Maximum 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.12.3 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Upstream base data rate – Step 1 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

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Table 11.18.12.j_3*4-4 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-3
x	x						x	Upstream base data rate extension – Minimum j_3 (bit 7), 16-TCPAM symmetric PSD
x	x					x		Upstream base data rate extension – Maximum j_3 (bit 7), 16-TCPAM symmetric PSD
x	x				x			Upstream base data rate extension – Step j_3 (bit 7), 16-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.12.j_3*4-3 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-2
x	x	x	x	x	x	x	x	Upstream base data rate extension – Minimum j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.12.j_3*4-2 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4-1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4-1
x	x	x	x	x	x	x	x	Upstream base data rate extension – Maximum j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.12.j_3*4-1 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 16-TCPAM symmetric – NPar(3) coding – Octet j_3*4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 16-TCPAM symmetric NPar(3)s – Octet j_3*4
x	x	x	x	x	x	x	x	Upstream base data rate extension – Step j_3 (bits 6-1), 16-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.13 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 1
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.13.1 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Upstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.13.2 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 3
x x	x x x x x x	Upstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.13.3 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet 4
x x	x x x x x x	Upstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

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Table 11.18.13.j_4*4-4 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-3
x x	x	Upstream base data rate extension – Minimum j_4 (bit 7), 32-TCPAM symmetric PSD
x x	x	Upstream base data rate extension – Maximum j_4 (bit 7), 32-TCPAM symmetric PSD
x x	x	Upstream base data rate extension – Step j_4 (bit 7), 32-TCPAM symmetric PSD
x x	x x x	Reserved for allocation by ITU-T

Table 11.18.13.j_4*4-3 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-2
x x	x x x x x x	Upstream base data rate extension – Minimum j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.13.j_4*4-2 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4-1

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4-1
x x	x x x x x x	Upstream base data rate extension – Maximum j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.13.j_4*4-1 – Standard information field – ITU-T G.991.2 Annex G upstream extended training rates – 32-TCPAM symmetric – NPar(3) coding – Octet j_4*4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream training rate – 32-TCPAM symmetric NPar(3)s – Octet j_4*4
x x	x x x x x x	Upstream base data rate extension – Step j_4 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.14 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet 1
x x	x	Downstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x x	x	Downstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x x	x	Downstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x x	x x x	Reserved for use by ITU-T

Table 11.18.14.1 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet 2
x x	x x x x x x	Downstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.14.2 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet 3
x x	x x x x x x	Downstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.14.3 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet 4
x x	x x x x x x	Downstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

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Table 11.18.14j_5*4-4 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-3

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet j_5*4-3
x	x						x	Downstream base data rate extension – Minimum j_5 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Downstream base data rate extension – Maximum j_5 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Downstream base data rate extension – Step j_5 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.18.14.j_5*4-3 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-2

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet j_5*4-2
x	x	x	x	x	x	x	x	Downstream base data rate extension –Minimum j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.14.j_5*4-2 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet j_5*4-1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet j_5*4-1
x	x	x	x	x	x	x	x	Downstream base data rate extension –Maximum j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.14.j_5*4-1 – Standard information field – ITU-T G.991.2 Annex G downstream extended PMMS rates – NPar(3) coding – Octet j_5*4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G downstream PMMS rate NPar(3)s – Octet j_5*4
x	x	x	x	x	x	x	x	Downstream base data rate extension –Step j_5 (bits 6-1), 32-TCPAM symmetric PSD (Note)

NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.

Table 11.18.15 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet 1
x	x						x	Upstream base data rate – Minimum 1 (bit 7), 32-TCPAM symmetric PSD
x	x					x		Upstream base data rate – Maximum 1 (bit 7), 32-TCPAM symmetric PSD
x	x				x			Upstream base data rate – Step 1 (bit 7), 32-TCPAM symmetric PSD
x	x	x	x	x				Reserved for use by ITU-T

Table 11.18.15.1 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet 2
x x	x x x x x x	Upstream base data rate – Minimum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.15.2 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet 3
x x	x x x x x x	Upstream base data rate – Maximum 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.15.3 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet 4
x x	x x x x x x	Upstream base data rate – Step 1 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

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Table 11.18.15.j_6*4-4 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-3

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet j_6*4-3
x x	x	Upstream base data rate extension – Minimum j_6 (bit 7), 32-TCPAM symmetric PSD
x x	x	Upstream base data rate extension – Maximum j_6 (bit 7), 32-TCPAM symmetric PSD
x x	x	Upstream base data rate extension – Step j_6 (bit 7), 32-TCPAM symmetric PSD
x x	x x x	Reserved for allocation by ITU-T

Table 11.18.15.j_6*4-3 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-2

Bits 8 7	6 5 4 3 2 1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet j_6*4-2
x x	x x x x x x	Upstream base data rate extension –Minimum j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.		

Table 11.18.15.j_6*4-2 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet j_6*4-1

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet j_6*4-1
x	x	x	x	x	x	x	x	Upstream base data rate extension –Maximum j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.								

Table 11.18.15.j_6*4-1 – Standard information field – ITU-T G.991.2 Annex G upstream extended PMMS rates – NPar(3) coding – Octet j_6*4

Bits 8	7	6	5	4	3	2	1	ITU-T G.991.2 Annex G upstream PMMS rate NPar(3)s – Octet j_6*4
x	x	x	x	x	x	x	x	Upstream base data rate extension –Step j_6 (bits 6-1), 32-TCPAM symmetric PSD (Note)
NOTE – The rates are determined by combining (bit 7) and the 6-bits in this octet to create a 7-bit number.								

9.4.10

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9.4.11

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9.4.12 ETSI MCM VDSL Par(2)/Par(3) parameters

Table 11.23 – Standard information field – ETSI MCM VDSL – NPar(2) coding

Bits 8	7	6	5	4	3	2	1	ETSI MCM VDSL Npar(2)s
x	x	x	x	x	x	x	1	Upstream use of lower band
x	x	x	x	x	x	1	x	Downstream use of lower band
x	x	x	x	x	1	x	x	Reserved for allocation by ETSI
x	x	x	x	1	x	x	x	STM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.24 – Standard information field – ETSI MCM VDSL – SPar(2) coding

Bits 8	7	6	5	4	3	2	1	ETSI MCM VDSL Spar(2)s
x	x	x	x	x	x	x	1	Sub-channel information (Note)
x	x	x	x	x	x	1	x	Reserved for allocation by ETSI
x	x	x	x	x	1	x	x	Reserved for allocation by ETSI
x	x	x	x	1	x	x	x	IDFT/DFT size
x	x	x	1	x	x	x	x	Initial length of CE
x	x	1	x	x	x	x	x	Reserved for allocation by ETSI
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.24 – Standard information field – ETSI MCM VDSL – SPar(2) coding

NOTE – The use of this bit is for further study and shall be set to ZERO in CLR, CL, MP and MS messages. This bit specifies the supported bearer channels for VDSL upstream/downstream transmissions in the TPS-TC sub-layer. The bearer channels are for further study.

Table 11.24.4 – Standard information field – ETSI MCM VDSL IDFT/DFT size – NPar(3) coding

Bits								ETSI MCM VDSL IDFT/DFT size Npar(3)s
8	7	6	5	4	3	2	1	
x	x	n_5	n_4	n_3	n_2	n_1	n_0	IDFT/DFT size (n × 256 points)

Table 11.24.5 – Standard information field – ETSI MCM VDSL initial length of CE – NPar(3) coding – Octet 1

Bits								ETSI MCM VDSL initial length of CE Npar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	ce_9	ce_8	ce_7	ce_6	Initial sample length of cyclic extension (high order bits)

Table 11.24.5.1 – Standard information field – ETSI MCM VDSL initial length of CE – NPar(3) coding – Octet 2

Bits								ETSI MCM VDSL initial length of CE Npar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	ce_5	ce_4	ce_3	ce_2	ce_1	ce_0	Initial sample length of cyclic extension (high order bits)

9.4.13

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9.4.14

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9.4.15 ITU-T G.992.3 Annexes A/L Par(2)/Par(3) parameters

Table 11.29 – Standard information field – ITU-T G.992.3 Annexes A/L NPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.29.1 – Standard information field – ITU-T G.992.3 Annexes A/L NPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostic mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	X	0	0	0	0	0	0	No parameters in this octet

Table 11.30 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Annex L reach extended PSD masks (Annex L)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.1 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.2 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.3 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.4 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.5 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.6 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.7 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.8 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.0.9 – Standard information field – ITU-T G.992.3 Annexes A/L SPar(2) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.30.1.1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.30.1.2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.30.1.3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.30.1.4 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.30.1.5 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.30.2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.30.2.1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.30.2.2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.30.2.3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.30.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.30.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.30.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.30.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.30.3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.30.3.1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.30.3.2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDds (bits 9 to 7)

Table 11.30.3.3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.30.3.4 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.30.3.5 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.30.4 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.30.4.1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.30.4.2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.30.4.3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss$_i$ (bits 6 to 1)

Table 11.30.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.30.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.30.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss$_i$ (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.30.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annexes A/L spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss$_i$ (bits 6 to 1)

Table 11.30.5 – Standard information field – ITU-T G.992.3 Annexes A/L transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annexes A/L transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.30.6 – Standard information field – ITU-T G.992.3 Annex L reach extended PSD masks NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex L reach extended PSD masks NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream mask 1 supported
x	x	x	x	x	x	1	x	Upstream mask 2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.6.1 – Standard information field – ITU-T G.992.3 Annex L reach extended PSD masks NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex L reach extended PSD masks NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream non-overlapped mask supported
x	x	x	x	x	x	1	x	Downstream overlapped mask supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annexes A/L downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n + 1) × 1 kbit/s, n = 3 to 63)

Table 11.30.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annexes A/L upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n + 1) × 1 kbit/s, n = 3 to 63)

Table 11.30.9 – Standard information field – ITU-T G.992.3 Annexes A/L maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.30.9.1 – Standard information field – ITU-T G.992.3 Annexes A/L maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.30.10 – Standard information field – ITU-T G.992.3 Annexes A/L maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x x	x x x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x x	x x x	Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.30.10.1 – Standard information field – ITU-T G.992.3 Annexes A/L maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.30.12 – Standard information field – ITU-T G.992.3 Annexes A/L number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.30.13 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.13.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.13.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.13.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.13.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.13.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.13.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A downstream STM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.13.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.13.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.13.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.14 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.14.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.14.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.14.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.14.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.14.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.14.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.14.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.14.8 – Standard information field – ITU-T G.992.3 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.14.9 – Standard information field – ITU-T G.992.3 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.15 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.15.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.15.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.15.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.15.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.15.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.15.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.15.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.30.15.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.15.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.16 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.16.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.16.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.16.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.16.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.16.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.16.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.16.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.30.16.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.16.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.17 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.17.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.17.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.17.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.17.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.17.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.17.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.17.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.17.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.17.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.17.10 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.18 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.18.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.18.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.18.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.18.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.18.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.18.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.18.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.18.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.18.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.18.10 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.19 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.19.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.19.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.19.3 – Standard information field – ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.19.4 – Standard information field – ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.19.5 – Standard information field – ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.99.2 Annexes A/L downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.20 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.20.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.20.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.30.21 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits							ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.22 – Standard information field – ITU-T G.992.3/5 Annexes A/L downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits							ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.25 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits							ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.25.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits							ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.25.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits							ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.25.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.25.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.25.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.25.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.25.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.25.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.25.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.26 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.26.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.26.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.26.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.26.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.26.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.26.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.26.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.26.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.26.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.27 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.27.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.27.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.27.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.27.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.27.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.27.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.27.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.30.27.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.27.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.28 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.28.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.28.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.28.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.28.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.28.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.28.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.28.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.30.28.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.28.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.29 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.29.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.29.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.29.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.29.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.29.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.29.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.29.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.29.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.29.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.29.10 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #1 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.30 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.30.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.30.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.30.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.30.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.30.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.30.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.30.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.30.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.30.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.30.10 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.31 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_ max (maximum net data rate, bits 12 to 7)

Table 11.30.31.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.31.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.31.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.30.32 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.32.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.32.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.32.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.30.37 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.37.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.37.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.37.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.37.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.37.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.37.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.37.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.37.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.37.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.38 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.38.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.38.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.38.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.38.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.38.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.38.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.38.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.38.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.38.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.39 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.39.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.39.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.39.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.39.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.39.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.39.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.39.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.30.39.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.39.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.40 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.40.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.40.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.40.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.40.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.40.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.40.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.40.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.30.40.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.40.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.41 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.41.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.41.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.41.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.41.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.41.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.41.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.41.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.41.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.41.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.41.10 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.42 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.42.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.42.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.42.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.42.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.42.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.42.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.42.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.42.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.42.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.42.10 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.43 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.43.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.43.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.43.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.30.44 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.44.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.44.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.44.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.30.49 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.49.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.49.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.49.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.49.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.49.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.49.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.49.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.49.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.49.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.50 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.50.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.50.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.50.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.50.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.50.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.50.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.50.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.50.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.50.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.51 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.51.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.51.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.51.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.51.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.51.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.51.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.51.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.30.51.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.51.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.52 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.52.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.52.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.52.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.52.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.52.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.52.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.52.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.30.52.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.52.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.53 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.53.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.53.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.53.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.53.4 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.53.5 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.53.6 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.53.7 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.30.53.8 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.53.9 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.53.10 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.54 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.30.54.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.30.54.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.54.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.54.4 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.30.54.5 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.30.54.6 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.30.54.7 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.30.54.8 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.30.54.9 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.54.10 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annexes A/L upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.30.55 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.55.1 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.55.2 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.55.3 – Standard information field – ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.30.56 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.30.56.1 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.30.56.2 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.30.56.3 – Standard information field – ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annexes A/L upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.16 ITU-T G.992.3 Annex B Par(2)/Par(3) parameters

Table 11.31 – Standard information field – ITU-T G.992.3 Annex B NPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex B NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Tones 1 to 32
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.31.1 – Standard information field – ITU-T G.992.3 Annexes B NPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annexes B NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	X	0	0	0	0	0	0	No parameters in this octet

Table 11.32 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.1 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.2 – Standard information field –ITU-T G.992.3 Annex B SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.3 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.4 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.5 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.6 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.7 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.8 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.0.9 – Standard information field – ITU-T G.992.3 Annex B SPar(2) coding – Octet 10

Bits								ITU-T G.992.3 Annex B SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.1 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.32.1.1 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.32.1.2 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.32.1.3 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.32.1.4 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.32.1.5 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.32.2 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.32.2.1 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.32.2.2 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 3
x x	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.32.2.3 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.32.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
x x	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.32.3 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDds (bits 9 to 7)

Table 11.32.3.1 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDds (bits 6 to 1)

Table 11.32.3.2 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDds (bits 9 to 7)

Table 11.32.3.3 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.32.3.4 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.32.3.5 – Standard information field – ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.32.4 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.32.4.1 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.32.4.2 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 3
x x	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.32.4.3 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.32.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
x x	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.32.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.32.5 – Standard information field – ITU-T G.992.3 Annex B transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annex B transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.32.7 – Standard information field – ITU-T G.992.3 Annex B downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex B downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.32.8 – Standard information field – ITU-T G.992.3 Annex B upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex B upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.32.9 – Standard information field – ITU-T G.992.3 Annex B maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.32.9.1 – Standard information field – ITU-T G.992.3 Annex B maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.32.10 – Standard information field – ITU-T G.992.3 Annex B maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x x	x x x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x x	x x x	Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.32.10.1 – Standard information field – ITU-T G.992.3 Annex B maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.32.12 – Standard information field – ITU-T G.992.3 Annex B number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.32.13 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.13.1 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.13.2 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.13.3 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.13.4 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.13.5 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.13.6 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.13.7 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.13.8 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.13.9 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.14 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.14.1 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.14.2 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.14.3 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.14.4 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.14.5 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.14.6 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.14.7 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.14.8 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.14.9 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.15 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.15.1 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.15.2 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.15.3 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.15.4 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.15.5 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.15.6 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.15.7 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.32.15.8 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.15.9 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.16 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.16.1 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.16.2 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.16.3 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.16.4 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.16.5 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.16.6 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.16.7 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.32.16.8 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.16.9 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.17 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.17.1 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.17.2 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.17.3 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.17.4 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.17.5 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.17.6 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.17.7 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.17.8 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.17.9 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.17.10 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.18 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.18.1 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.18.2 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.18.3 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.18.4 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.18.5 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.18.6 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.18.7 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.18.8 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.18.9 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.18.10 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.19 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.19.1 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.19.2 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.32.19.3 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.19.4 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 5
x x	x x x x x 1	D_0 value of 288 is supported
x x	x x x x 1 x	D_0 value of 320 is supported
x x	x x x 1 x x	D_0 value of 352 is supported
x x	x x 1 x x x	D_0 value of 384 is supported
x x	x 1 x x x x	D_0 value of 416 is supported
x x	1 x x x x x	D_0 value of 448 is supported
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.32.19.5 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	Downstream PMS-TC latency path #0 NPar(3)s – Octet 6
x x	x x x x x 1	D_0 value of 480 is supported
x x	x x x x 1 x	D_0 value of 511 is supported
x x	x x x 1 x x	Reserved for allocation by ITU-T
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.32.20 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.20.1 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.20.2 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 3
x x	x x x x	D_0 max value supported, D_0 = n*4+8, n=0,2, 6, 14
x x	x x	0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.32.21 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #0 RTX NPar(3)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.32.22 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #0 RTX NPar(3)
x x	x	64/65-octet encapsulation with short packets
x x	x	64/65-octet encapsulation with pre-emption
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.32.25 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.25.1 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.25.2 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.25.3 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.25.4 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.25.5 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.25.6 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.25.7 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.25.8 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.25.9 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.26 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.26.1 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.26.2 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.26.3 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.26.4 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.26.5 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.26.6 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.26.7 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.26.8 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.26.9 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.27 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.27.1 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.27.2 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.27.3 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.27.4 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.27.5 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.27.6 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.27.7 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.32.27.8 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.27.9 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.28 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.28.1 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.28.2 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.28.3 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.28.4 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.28.5 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.28.6 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.28.7 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.32.28.8 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.28.9 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.29 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.29.1 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.29.2 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.29.3 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.29.4 – Standard information field – ITU-T G.992.3 Annex B **downstream PTM TPS-TC #1 NPar(3) coding – Octet 5**

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.29.5 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.29.6 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.29.7 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.29.8 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.29.9 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.29.10 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.30 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.30.1 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.30.2 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.30.3 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.30.4 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.30.5 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.30.6 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.30.7 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.30.8 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.30.9 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.30.10 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.31 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.31.1 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.31.2 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.32.31.3 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.32.32 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.32.1 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.32.2 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x x	x x x x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.32.32.3 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x x	x x x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.32.37 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.37.1 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.37.2 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.37.3 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.37.4 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.37.5 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.37.6 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.37.7 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.37.8 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.37.9 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.38 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.38.1 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.38.2 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.38.3 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.38.4 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.38.5 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.38.6 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.38.7 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.38.8 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.38.9 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.39 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.39.1 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.39.2 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.39.3 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.39.4 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.39.5 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.39.6 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.39.7 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.32.39.8 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.39.9 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.40 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.40.1 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.40.2 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.40.3 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.40.4 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.40.5 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.40.6 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.40.7 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.32.40.8 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.40.9 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.32.41 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.41.1 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.41.2 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.41.3 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.41.4 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.41.5 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.41.6 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.41.7 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.41.8 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.41.9 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.41.10 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.42 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.42.1 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.42.2 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.42.3 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.42.4 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.42.5 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.42.6 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.42.7 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.42.8 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.42.9 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.42.10 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.43 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.43.1 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.43.2 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.32.43.3 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.32.44 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.44.1 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.44.2 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.32.44.3 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.32.49 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.49.1 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.49.2 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.49.3 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.49.4 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.49.5 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.49.6 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.49.7 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.49.8 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.49.9 – Standard information field – ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.50 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.50.1 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.50.2 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.50.3 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.50.4 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.50.5 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.50.6 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.50.7 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.32.50.8 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.50.9 – Standard information field – ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.51 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.51.1 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.51.2 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.51.3 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.51.4 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.51.5 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.51.6 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.51.7 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.32.51.8 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.51.9 – Standard information field – ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.52 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.52.1 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.52.2 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.52.3 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.52.4 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.52.5 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.52.6 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.52.7 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.32.52.8 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.52.9 – Standard information field – ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.53 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.53.1 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.53.2 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.53.3 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.53.4 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.53.5 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.53.6 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.53.7 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.32.53.8 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.53.9 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.53.10 – Standard information field – ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.54 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.32.54.1 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.32.54.2 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.54.3 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.54.4 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.32.54.5 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.32.54.6 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.32.54.7 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.32.54.8 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.32.54.9 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.32.54.10 – Standard information field – ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.32.55 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.55.1 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.55.2 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.32.55.3 – Standard information field – ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.32.56 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.32.56.1 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.32.56.2 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.32.56.3 – Standard information field – ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.17 ITU-T G.992.3 Annex I Par(2)/Par(3) parameters

Table 11.33 – Standard information field – ITU-T G.992.3 Annex I NPar(2) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I NPar(2)s – Octet 1
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.33.1 – Standard information field – ITU-T G.992.3 Annexes I NPar(2) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes I NPar(2)s – Octet 2
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	X	0	0	0	0	0	0	No parameters in this octet

Table 11.34 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I SPar(2)s – Octet 1
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.1 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.2 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.3 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.4 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.5 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.6 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.7 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.8 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.0.9 – Standard information field – ITU-T G.992.3 Annex I SPar(2) coding – Octet 10

Bits								ITU-T G.992.3 Annex I SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.1 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.34.1.1 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.34.1.2 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.34.1.3 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.34.1.4 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.34.1.5 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.34.2 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.34.2.1 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.34.2.2 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.34.2.3 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.34.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.34.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.34.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.34.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.34.3 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.34.3.1 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.34.3.2 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.34.3.3 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.34.3.4 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.34.3.5 – Standard information field – ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.34.4 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.34.4.1 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.34.4.2 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.34.4.3 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.34.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.34.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.34.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.34.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.34.5 – Standard information field – ITU-T G.992.3 Annex I transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annex I transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.34.7 – Standard information field – ITU-T G.992.3 Annex I downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex I downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.34.8 – Standard information field – ITU-T G.992.3 Annex I upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex I upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.34.9 – Standard information field – ITU-T G.992.3 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.34.9.1 – Standard information field – ITU-T G.992.3 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.10 – Standard information field – ITU-T G.992.3 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.34.10.1 – Standard information field – ITU-T G.992.3 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.12 – Standard information field – ITU-T G.992.3 Annexes I number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annexe I number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	X	*NBPds* (coded in bits 1 to 5)
x	x	x						Reserved for allocation by ITU-T

Table 11.34.13 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.13.1 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.13.2 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to **7**)

Table 11.34.13.3 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.13.4 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.13.5 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.13.6 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.13.7 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.13.8 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.13.9 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.34.14 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.14.1 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.14.2 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.14.3 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.14.4 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.14.5 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.14.6 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.14.7 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.14.8 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.14.9 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.15 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.15.1 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.15.2 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.15.3 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.15.4 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.15.5 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.15.6 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.15.7 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.34.15.8 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.15.9 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.16 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.16.1 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.16.2 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.16.3 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.16.4 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.16.5 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.16.6 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.16.7 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.34.16.8 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.16.9 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.17 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.17.1 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.17.2 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.17.3 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.17.4 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.17.5 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.17.6 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.17.7 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.17.8 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.17.9 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.17.10 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.18 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.18.1 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.18.2 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.18.3 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.18.4 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.18.5 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.18.6 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.18.7 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.34.18.8 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.18.9 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.18.10 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.19 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.19.1 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.19.2 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.19.3 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.19.4 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.19.5 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.20 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.20.1 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.20.2 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 3
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.34.21 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #0 RTX NPar(3)
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.22 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #0 RTX NPar(3)
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.25 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.25.1 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.25.2 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.25.3 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.25.4 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.25.5 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.25.6 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.25.7 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.25.8 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.25.9 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.26 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.26.1 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.26.2 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.26.3 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.26.4 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.26.5 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.26.6 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.26.7 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.34.26.8 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.26.9 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.27 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.27.1 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.27.2 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.27.3 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.27.4 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.27.5 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.27.6 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.27.7 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.34.27.8 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.27.9 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.28 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.28.1 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.28.2 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.28.3 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.28.4 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.28.5 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 6
x x x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.28.6 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 7
x x x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.28.7 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 8
x x	Error_max (maximum bit error ratio)
x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	Reserved for allocation by ITU-T
x x	IMA_flag

Table 11.34.28.8 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.28.9 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.29 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.29.1 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.29.2 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.29.3 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.29.4 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.29.5 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.29.6 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.29.7 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.29.8 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.29.9 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.29.10 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.30 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.30.1 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.30.2 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.30.3 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.30.4 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.30.5 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.30.6 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.30.7 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.30.8 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.30.9 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.30.10 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.31 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.31.1 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.31.2 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.31.3 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.32 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.32.1 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.32.2 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.32.3 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.37 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.37.1 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.37.2 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.37.3 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.37.4 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.37.5 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.37.6 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.37.7 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.37.8 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.37.9 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.38 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.38.1 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.38.2 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.38.3 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.38.4 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.38.5 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.38.6 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.38.7 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.38.8 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.38.9 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.39 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.39.1 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.39.2 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.39.3 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.39.4 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.39.5 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.39.6 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.39.7 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.34.39.8 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.39.9 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.34.40 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.40.1 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.40.2 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.40.3 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.40.4 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.40.5 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.40.6 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.40.7 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.34.40.8 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.40.9 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.41 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.41.1 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.41.2 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.41.3 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.41.4 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.41.5 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.41.6 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.41.7 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		INP_no_erasure_not_required
x x	x	Reserved for allocation by ITU-T

Table 11.34.41.8 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.41.9 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.41.10 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.42 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.42.1 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.42.2 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.42.3 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.42.4 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.42.5 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.42.6 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.42.7 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.42.8 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.42.9 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.42.10 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.43 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.43.1 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.43.2 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.43.3 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.44 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.44.1 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.44.2 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.44.3 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.49 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.49.1 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.49.2 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.49.3 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.49.4 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.49.5 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.49.6 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.49.7 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.49.8 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.49.9 – Standard information field – ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.50 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.50.1 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.50.2 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.50.3 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.50.4 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.50.5 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.50.6 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.50.7 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.50.8 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.50.9 – Standard information field – ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.51 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.51.1 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.51.2 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.51.3 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.51.4 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.51.5 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.51.6 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.51.7 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.34.51.8 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.51.9 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.52 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.52.1 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.52.2 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.52.3 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.52.4 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.52.5 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.52.6 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.52.7 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.34.52.8 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.52.9 – Standard information field – ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.53 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.53.1 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.53.2 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.53.3 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.53.4 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.53.5 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.53.6 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.53.7 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.34.53.8 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.53.9 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.53.10 – Standard information field – ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.54 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.34.54.1 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.34.54.2 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.54.3 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.54.4 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.34.54.5 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.34.54.6 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.34.54.7 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.34.54.8 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.34.54.9 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.34.54.10 – Standard information field – ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.34.55 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.55.1 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.55.2 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.55.3 – Standard information field – ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.34.56 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.34.56.1 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.34.56.2 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.34.56.3 – Standard information field – ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.18 ITU-T G.992.3 Annex J Par(2)/Par(3) parameters

Table 11.35 – Standard information field – ITU-T G.992.3 Annex J NPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex J NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	PSD shape support
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.35.1 – Standard information field – ITU-T G.992.3 Annexes J NPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annexes J NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	X	0	0	0	0	0	0	No parameters in this octet

Table 11.36 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Submode PSD masks
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.1 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Submode PSD shape
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.2 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.3 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.4 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.5 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.6 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.7 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.8 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annex J SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.0.9 – Standard information field – ITU-T G.992.3 Annex J SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.1 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.36.1.1 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.36.1.2 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.36.1.3 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.36.1.4 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 5
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.36.1.5 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum bounds upstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPus (bits 6 to 1)

Table 11.36.2 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.36.2.1 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.36.2.2 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tssi (bit 7)

Table 11.36.2.3 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" $\log_tss_i$ (bits 6 to 1)

Table 11.36.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.36.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.36.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.36.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.36.3 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.36.3.1 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.36.3.2 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.36.3.3 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.36.3.4 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.36.3.5 – Standard information field – ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.36.4 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.36.4.1 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.36.4.2 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.36.4.3 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.36.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.36.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.36.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.36.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.36.5 – Standard information field – ITU-T G.992.3 Annex J transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annex J transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.36.6 – Standard information field – ITU-T G.992.3 Annex J submode PSD mask NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J submode PSD mask NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-32 supported
x	x	x	x	x	x	1	x	ADLU-36 supported
x	x	x	x	x	1	x	x	ADLU-40 supported
x	x	x	x	1	x	x	x	ADLU-44 supported
x	x	x	1	x	x	x	x	ADLU-48 supported
x	x	1	x	x	x	x	x	ADLU-52 supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.6.1 – Standard information field – ITU-T G.992.3 Annex J submode PSD mask NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J submode PSD mask NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-56 supported
x	x	x	x	x	x	1	x	ADLU-60 supported
x	x	x	x	x	1	x	x	ADLU-64 supported
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.7 – Standard information field – ITU-T G.992.3 Annex J downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex J downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.36.8 – Standard information field – ITU-T G.992.3 Annex J upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex J upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.36.9 – Standard information field – ITU-T G.992.3 Annex J maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.36.9.1 – Standard information field – ITU-T G.992.3 Annex J maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.36.10 – Standard information field – ITU-T G.992.3 Annex J maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.36.10.1 – Standard information field – ITU-T G.992.3 Annex J maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.36.11 – Standard information field – ITU-T G.992.3 Annex J submode PSD shape NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J submode PSD shape NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Tone index n (bit 6 to 1, coded as n-1)

Table 11.36.11.1 – Standard information field – ITU-T G.992.3 Annex J submode PSD shape NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J submode PSD shape NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	PSD at this tone index n (bit 6 to 1, coded as n)

…

Table 11.36.11.2*(j-1) – Standard information field – ITU-T G.992.3 Annex J submode PSD shape NPar(3) coding – Octet 2*(j-1)+1

Bits								ITU-T G.992.3 Annex J submode PSD shape NPar(3)s – Octet 2*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Tone index n (bit 6 to 1, coded as n-1)

NOTE – j is the number of subcarrier indices used to specify the spectral shape.

Table 11.36.11.2*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex J submode PSD shape NPar(3) coding – Octet 2*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J submode PSD shape NPar(3)s – Octet 2*(j-1)+2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.36.12 – Standard information field – ITU-T G.992.3 Annex J number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.36.13 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.13.1 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.13.2 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.13.3 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.13.4 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.13.5 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.13.6 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.13.7 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.13.8 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.13.9 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.14 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.14.1 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.14.2 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.14.3 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.14.4 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.14.5 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.14.6 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.14.7 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.36.14.8 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.14.9 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.15 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.15.1 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.15.2 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.15.3 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.15.4 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.15.5 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.15.6 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.15.7 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.36.15.8 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.15.9 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.36.16 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.16.1 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.16.2 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.16.3 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.16.4 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.16.5 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.16.6 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.16.7 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.36.16.8 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.16.9 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.17 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.17.1 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.17.2 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.17.3 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.17.4 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.17.5 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.17.6 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.17.7 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.17.8 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.17.9 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.17.10 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.18 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.18.1 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.18.2 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.18.3 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.18.4 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.18.5 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.18.6 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.18.7 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.36.18.8 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.18.9 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.18.10 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.19 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.19.1 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.19.2 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.36.19.3 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.19.4 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.19.5 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.20 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.20.1 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.20.2 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.36.21 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.22 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.25 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.25.1 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.25.2 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.25.3 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.25.4 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.25.5 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.25.6 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.25.7 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.25.8 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.25.9 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.26 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.26.1 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.26.2 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.26.3 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.26.4 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.26.5 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.26.6 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.26.7 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.26.8 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.26.9 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.27 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.27.1 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.27.2 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.27.3 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.27.4 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.27.5 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.27.6 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.27.7 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.36.27.8 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.27.9 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.28 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.28.1 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.28.2 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.28.3 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.28.4 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.28.5 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.28.6 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.28.7 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.36.28.8 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.28.9 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.29 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.29.1 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.29.2 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.29.3 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.29.4 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.29.5 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.29.6 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.29.7 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.29.8 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.29.9 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.29.10 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.30 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.30.1 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.30.2 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.30.3 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.30.4 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.30.5 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.30.6 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.30.7 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.30.8 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.30.9 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.30.10 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.31 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.31.1 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.31.2 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.36.31.3 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.36.32 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.32.1 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.32.2 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x x	x x x x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.36.32.3 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x x	x x x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.36.37 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.37.1 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.37.2 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.37.3 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.37.4 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.37.5 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.37.6 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.37.7 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.37.8 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.37.9 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.38 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.38.1 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.38.2 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.38.3 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.38.4 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.38.5 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.38.6 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.38.7 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.38.8 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.38.9 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.39 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.39.1 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.39.2 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.39.3 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.39.4 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.39.5 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.39.6 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.39.7 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 8
x x	1 1 1 1 x x	Error_max (maximum bit error ratio)
x x	1 1 x x 1 1	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	1 x 1 1 1 1	INP_no_erasure_not_required
x x	x 1 1 1 1 1	IMA_flag

Table 11.36.39.8 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.39.9 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.40 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.40.1 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.40.2 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.40.3 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.40.4 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.40.5 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.40.6 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.40.7 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.36.40.8 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.40.9 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.41 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.41.1 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.41.2 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.41.3 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.41.4 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.41.5 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.41.6 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.41.7 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.41.8 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.41.9 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.41.10 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.42 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.42.1 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.42.2 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.42.3 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.42.4 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.42.5 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.42.6 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.42.7 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.42.8 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.42.9 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.42.10 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.43 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.43.1 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.43.2 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.36.43.3 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.36.44 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.44.1 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.44.2 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.36.44.3 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.36.49 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.49.1 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.49.2 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.49.3 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.49.4 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.49.5 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.49.6 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.49.7 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.49.8 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.49.9 – Standard information field – ITU-T G.992.3 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes J downstream STM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.50 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.50.1 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.50.2 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.50.3 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.50.4 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.50.5 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.50.6 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.50.7 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.36.50.8 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.50.9 – Standard information field – ITU-T G.992.3 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes J upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.51 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.51.1 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.51.2 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.51.3 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.51.4 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.51.5 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.51.6 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.51.7 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.36.51.8 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.51.9 – Standard information field – ITU-T G.992.3 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annexes J downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.52 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.52.1 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.52.2 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.52.3 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.52.4 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.52.5 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.52.6 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.52.7 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.36.52.8 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.52.9 – Standard information field – ITU-T G.992.3 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annexes J downstream ATM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.53 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.53.1 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.53.2 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.53.3 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.53.4 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.53.5 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.53.6 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.53.7 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.36.53.8 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.53.9 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.53.10 – Standard information field – ITU-T G.992.3 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.54 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.36.54.1 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.36.54.2 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.54.3 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.54.4 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.36.54.5 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.36.54.6 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.36.54.7 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.36.54.8 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.36.54.9 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.36.54.10 – Standard information field – ITU-T G.992.3 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.36.55 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.55.1 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.55.2 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 3
x x	x x x x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.36.55.3 – Standard information field – ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 4
x x	x x x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.36.56 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.36.56.1 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.36.56.2 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 3
x x	x x x x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.36.56.3 – Standard information field – ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 4
x x	x x x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

9.4.19 ITU-T G.992.4 Annex A Par(2)/Par(3) parameters

Table 11.37 – Standard information field – ITU-T G.992.4 Annex A NPar(2) coding

Bits								ITU-T G.992.4 Annex A NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 1

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.1 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 2

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.2 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 3

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.3 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 4

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.4 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 5

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.5 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 6

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.6 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 7

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.7 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 8

Bits								ITU-T G.992.4 Annex A SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.8 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A SPar(2)s – Octet 9
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.0.9 – Standard information field – ITU-T G.992.4 Annex A SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.38.1 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.38.1.1 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.38.1.2 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.38.1.3 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.38.1.4 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 5
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.38.1.5 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum bounds upstream NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.38.2 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.38.2.1 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.38.2.2 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 3
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.38.2.3 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.38.2.4*(j-1) – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.38.2.4*(j-1)+1 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.38.2.4*(j-1)+2 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.38.2.4*(j-1)+3 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.38.3 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.38.3.1 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.38.3.2 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.38.3.3 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.38.3.4 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.38.3.5 – Standard information field – ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.38.4 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.38.4.1 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.38.4.2 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tssi (bit 7)

Table 11.38.4.3 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.38.4.4*(j-1) – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.38.4.4*(j-1)+1 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.38.4.4*(j-1)+2 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.38.4.4*(j-1)+3 – Standard information field – ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.4 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.38.5 – Standard information field – ITU-T G.992.4 Annex A transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.4 Annex A transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.38.7 – Standard information field – ITU-T G.992.4 Annex A downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.4 Annex A downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.38.8 – Standard information field – ITU-T G.992.4 Annex A upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.4 Annex A upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.38.9 – Standard information field – ITU-T G.992.4 Annex A maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.38.9.1 – Standard information field – ITU-T G.992.4 Annex A maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.38.10 – Standard information field – ITU-T G.992.4 Annex A maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.38.10.1 – Standard information field – ITU-T G.992.4 Annex A maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.38.13 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.13.1 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.13.2 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.13.3 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.13.4 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.13.5 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.13.6 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.13.7 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.14 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.14.1 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.14.2 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.14.3 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.14.4 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.14.5 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.14.6 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.14.7 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.15 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.15.1 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.15.2 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.15.3 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.15.4 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.15.5 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 6
x x x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.15.6 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 7
x x x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.15.7 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 8
x x	Error_max (maximum bit error ratio)
x x	INP_min (minimum impulse noise protection)
x x	Reserved for allocation by ITU-T
x x	IMA_flag

Table 11.38.16 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x x x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.16.1 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x x x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.16.2 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x x x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.16.3 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x x x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.16.4 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.16.5 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.16.6 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.16.7 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.17 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.17.1 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.17.2 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.17.3 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.17.4 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.17.5 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.17.6 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.17.7 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.18 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.18.1 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.18.2 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.18.3 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.18.4 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.18.5 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.18.6 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.18.7 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.19 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.19.1 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.20 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.20.1 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.21 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.21.1 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.21.2 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.21.3 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.21.4 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.21.5 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.21.6 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.21.7 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.22 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.22.1 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.22.2 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.22.3 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.22.4 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.22.5 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.22.6 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.22.7 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.23 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.23.1 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.23.2 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.23.3 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.23.4 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.23.5 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.23.6 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.23.7 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection)
x x	x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.38.24 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.24.1 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.24.2 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.24.3 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.24.4 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.24.5 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.24.6 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.24.7 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.25 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.25.1 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.25.2 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.25.3 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.25.4 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.25.5 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.25.6 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.25.7 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.26 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.26.1 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.26.2 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.26.3 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.26.4 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.26.5 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.26.6 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.26.7 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.27 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.27.1 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.27.2 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.38.27.3 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.38.28 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.28.1 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.28.2 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.38.28.3 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.38.29 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.29.1 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.29.2 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.29.3 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.29.4 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.29.5 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.29.6 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.29.7 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.30 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.30.1 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.30.2 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.30.3 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.30.4 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.30.5 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.30.6 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.30.7 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.31 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.31.1 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.31.2 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.31.3 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.31.4 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.31.5 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.31.6 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.31.7 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.32 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.32.1 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.32.2 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.32.3 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.32.4 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.32.5 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.32.6 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.32.7 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.33 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.33.1 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.33.2 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.33.3 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.33.4 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.33.5 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.33.6 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.33.7 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection)
x x		Reserved for allocation by ITU-T
x x		Reserved for allocation by ITU-T

Table 11.38.34 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.34.1 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.34.2 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.34.3 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.34.4 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.34.5 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.34.6 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.34.7 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.35 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.35.1 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.35.2 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.38.35.3 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.38.36 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.36.1 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.36.2 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.38.36.3 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.38.37 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.37.1 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.37.2 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.37.3 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.37.4 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.37.5 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.37.6 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.37.7 – Standard information field – ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.38 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.38.1 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.38.2 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.38.3 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.38.4 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.38.5 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.38.6 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.38.7 – Standard information field – ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection)
x x	. x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.38.39 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.39.1 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.39.2 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.39.3 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.39.4 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.39.5 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.39.6 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.39.7 – Standard information field – ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.40 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.40.1 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.40.2 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.40.3 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.40.4 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.40.5 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.40.6 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.40.7 – Standard information field – ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.38.41 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.41.1 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.41.2 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.41.3 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.41.4 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.41.5 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.41.6 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.41.7 – Standard information field – ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.42 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.38.42.1 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.38.42.2 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.42.3 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.42.4 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.38.42.5 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.38.42.6 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.38.42.7 – Standard information field – ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.38.43 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.43.1 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.43.2 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.38.43.3 – Standard information field – ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.38.44 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.38.44.1 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.38.44.2 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.38.44.3 – Standard information field – ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.20 ITU-T G.992.4 Annex I Par(2)/Par(3) parameters

Table 11.39 – Standard information field – ITU-T G.992.4 Annex I NPar(2) coding

Bits								ITU-T G.992.4 Annex I NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 1

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.1 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 2

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.2 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 3

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.3 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 4

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.4 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 5

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.5 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 6

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.6 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 7

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.7 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 8

Bits								ITU-T G.992.4 Annex I SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.8 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I SPar(2)s – Octet 9
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.0.9 – Standard information field – ITU-T G.992.4 Annex I SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.40.1 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.40.1.1 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.40.1.2 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.40.1.3 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.40.1.4 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.40.1.5 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.40.2 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.40.2.1 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.40.2.2 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.40.2.3 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.40.2.4*(j-1) – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.40.2.4*(j-1)+1 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.40.2.4*(j-1)+2 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.40.2.4*(j-1)+3 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.40.3 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.40.3.1 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.40.3.2 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.40.3.3 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.40.3.4 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.40.3.5 – Standard information field – ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.40.4 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.40.4.1 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.40.4.2 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.40.4.3 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.40.4.4*(j-1) – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.40.4.4*(j-1)+1 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.40.4.4*(j-1)+2 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.40.4.4*(j-1)+3 – Standard information field – ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.4 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.40.5 – Standard information field – ITU-T G.992.4 Annex I transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.4 Annex I transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.40.7 – Standard information field – ITU-T G.992.4 Annex I downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.4 Annex I downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.40.8 – Standard information field – ITU-T G.992.4 Annex I upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.4 Annex I upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.40.9 – Standard information field – ITU-T G.992.4 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.40.9.1 – Standard information field – ITU-T G.992.4 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.40.10 – Standard information field – ITU-T G.992.4 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.40.10.1 – Standard information field – ITU-T G.992.4 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.40.13 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.13.1 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.13.2 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.13.3 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.13.4 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.13.5 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.13.6 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.13.7 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.14 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.14.1 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.14.2 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.14.3 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.14.4 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.14.5 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.14.6 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.14.7 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.15 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.15.1 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.15.2 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.15.3 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.15.4 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.15.5 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.15.6 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.15.7 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.16 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.16.1 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.16.2 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.16.3 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.16.4 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.16.5 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.16.6 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.16.7 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection)
x x	x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.40.17 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.17.1 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.17.2 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.17.3 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.17.4 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.17.5 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.17.6 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.17.7 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.18 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.18.1 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.18.2 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.18.3 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.18.4 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.18.5 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.18.6 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.18.7 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.19 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.19.1 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.20 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.20.1 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.21 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.21.1 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.21.2 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.21.3 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.21.4 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.21.5 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.21.6 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.21.7 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.22 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.22.1 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.22.2 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.22.3 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.22.4 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.22.5 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.22.6 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.22.7 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.23 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.23.1 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.23.2 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.23.3 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.23.4 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.23.5 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.23.6 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.23.7 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.24 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.24.1 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.24.2 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.24.3 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.24.4 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.24.5 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.24.6 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.24.7 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.25 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.25.1 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.25.2 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.25.3 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.25.4 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.25.5 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.25.6 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.25.7 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.26 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.26.1 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.26.2 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.26.3 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.26.4 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.26.5 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.26.6 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.26.7 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.27 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.27.1 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.27.2 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.40.27.3 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.40.28 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.28.1 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.28.2 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x x	x x x x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.40.28.3 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x x	x x x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.40.29 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.29.1 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.29.2 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.29.3 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.29.4 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.29.5 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.29.6 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.29.7 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.30 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.30.1 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.30.2 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.30.3 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.30.4 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.30.5 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.30.6 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.30.7 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 8
x x	1 1 1 1 x x	Error_max (maximum bit error ratio)
x x	1 1 x x 1 1	INP_min (minimum impulse noise protection)
x x	1 x 1 1 1 1	Reserved for allocation by ITU-T
x x	x 1 1 1 1 1	Reserved for allocation by ITU-T

Table 11.40.31 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.31.1 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.31.2 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.31.3 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.31.4 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.31.5 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.31.6 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.31.7 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.32 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.32.1 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.32.2 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.32.3 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.32.4 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.32.5 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.32.6 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.32.7 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.33 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.33.1 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.33.2 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.33.3 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.33.4 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.33.5 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.33.6 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.33.7 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.34 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.34.1 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.34.2 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.34.3 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.34.4 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.34.5 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.34.6 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.34.7 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.35 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.35.1 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.35.2 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.40.35.3 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.40.36 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.36.1 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.36.2 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.40.36.3 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.40.37 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.37.1 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.37.2 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.37.3 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.37.4 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.37.5 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.37.6 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.37.7 – Standard information field – ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.38 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.38.1 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.38.2 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.38.3 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.38.4 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.38.5 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.38.6 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.38.7 – Standard information field – ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.39 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.39.1 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.39.2 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.39.3 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.39.4 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.39.5 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.39.6 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.39.7 – Standard information field – ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.40 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.40.1 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.40.2 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.40.3 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.40.4 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.40.5 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.40.6 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.40.7 – Standard information field – ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.40.41 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.41.1 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.41.2 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.41.3 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.41.4 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.41.5 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.41.6 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.41.7 – Standard information field – ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.4 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.40.42 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.40.42.1 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.40.42.2 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.42.3 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.42.4 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.40.42.5 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.40.42.6 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.40.42.7 – Standard information field – ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.40.43 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.43.1 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.43.2 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.40.43.3 – Standard information field – ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.40.44 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.40.44.1 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.40.44.2 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.40.44.3 – Standard information field – ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.4 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.21 ITU-T G.992.3 Annex C Par(2)/Par(3) parameters

Table 11.41 – Standard information field – ITU-T G.992.3 Annex C NPar(2) coding- Octet 1

Bits								ITU-T G.992.3 Annex C NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.41.1 – Standard information field – ITU-T G.992.3 Annex C NPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex C NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 1
x	x	x	x	x	x	1	x	Profile 2
x	x	x	x	x	1	x	x	Profile 3
x	x	x	x	1	x	x	x	Profile 4
x	x	x	1	x	x	x	x	Profile 5
x	x	1	x	x	x	x	x	Profile 6
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.41.2 – Standard information field – ITU-T G.992.3 Annex C NPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex C NPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Sub-annex
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.1 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.2 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.3 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.4 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.5 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.6 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.7 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.8 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annex C SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.0.9 – Standard information field – ITU-T G.992.3 Annex C SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.1 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.42.1.1 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.42.1.2 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.42.1.3 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.42.1.4 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 5
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.42.1.5 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.42.2 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.42.2.1 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.42.2.2 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.42.2.3 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.42.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.42.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.42.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.42.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.42.3 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.42.3.1 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.42.3.2 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.42.3.3 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.42.3.4 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.42.3.5 – Standard information field – ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.42.4 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.42.4.1 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.42.4.2 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.42.4.3 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.42.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.42.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.42.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.42.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.42.5 – Standard information field – ITU-T G.992.3 Annex C transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annex C transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.42.6 – Standard information field – ITU-T G.992.3 Annex C sub-annex NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C sub-annex NPar(3)s – Octet 1
x	x	x	x	x	x	x	1	CA
x	x	x	x	x	x	1	x	CB
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.7 – Standard information field – ITU-T G.992.3 Annex C downstream overhead data rate NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C downstream overhead data rate NPar(3)s
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.42.8 – Standard information field – ITU-T G.992.3 Annex C upstream overhead data rate NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream overhead data rate NPar(3)s
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.42.9 – Standard information field – ITU-T G.992.3 Annex C maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
x	x				x	x	x	Reserved for allocation by ITU-T
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.42.10 – Standard information field – ITU-T G.992.3 Annex C maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x	x				x	x	x	Reserved for allocation by ITU-T
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.42.12 – Standard information field – ITU-T G.992.3 Annex C number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	*NBPds* (coded in bits 1 to 5)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.15 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.15.1 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.15.2 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.15.3 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.15.4 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.15.5 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.15.6 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.15.7 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.42.15.8 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.15.9 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.15.10 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.16 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.16.1 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.16.2 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.16.3 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.16.4 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.16.5 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.16.6 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.16.7 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.42.16.8 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.16.9 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.16.10 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.19 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.19.1 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.19.2 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.19.3 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.19.4 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.19.5 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.20 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.20.1 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.20.2 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.42.27 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.27.1 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.27.2 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.27.3 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.27.4 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.27.5 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.27.6 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.27.7 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.42.27.8 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.27.9 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.27.10 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.28 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.28.1 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.28.2 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.28.3 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.28.4 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.28.5 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.28.6 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.28.7 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.42.28.8 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.28.9 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.28.10 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.31 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.31.1 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.31.2 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.31.3 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.42.32 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.32.1 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.32.2 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.32.3 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.42.39 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.39.1 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.39.2 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.39.3 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.39.4 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.39.5 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.39.6 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.39.7 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.42.39.8 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.39.9 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.39.10 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.40 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.40.1 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.40.2 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.40.3 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.40.4 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.40.5 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.40.6 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.40.7 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.42.40.8 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.40.9 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x	Jitter_max (maximum jitter) (coded as 31)
x x	x	Reserved for allocation by ITU-T

Table 11.42.40.10 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.43 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.43.1 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.43.2 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.43.3 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.42.44 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.44.1 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.44.2 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.44.3 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.42.51 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.51.1 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.51.2 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.51.3 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.51.4 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.51.5 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.51.6 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.51.7 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.42.51.8 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.51.9 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.51.10 – Standard information field – ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.52 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.42.52.1 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.42.52.2 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.52.3 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.52.4 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.42.52.5 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.42.52.6 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.42.52.7 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.42.52.8 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.42.52.9 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.42.52.10 – Standard information field – ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.42.55 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.55.1 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.55.2 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.55.3 – Standard information field – ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.42.56 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.42.56.1 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.42.56.2 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.42.56.3 – Standard information field – ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.22 ITU-T G.992.5 Annex A Par(2)/Par(3) parameters

Table 11.43 – Standard information field – ITU-T G.992.5 Annex A NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex A NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Downstream spectrum shaping using time domain filtering only
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.43.1 – Standard information field – ITU-T G.992.5 Annex A NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex A NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.1 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.2 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.3 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.4 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.5 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.6 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.7 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.8 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 9

Bits								ITU-T G.992.5 Annex A SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.0.9 – Standard information field – ITU-T G.992.5 Annex A SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.1 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.44.1.1 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.44.1.2 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.44.1.3 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.44.1.4 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 5
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.44.1.5 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum bounds upstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPus (bits 6 to 1)

Table 11.44.2 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.44.2.1 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.44.2.2 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.44.2.3 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.44.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.44.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.44.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.44.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.44.3 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.44.3.1 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.44.3.2 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.44.3.3 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.44.3.4 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.44.3.5 – Standard information field – ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.44.4 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.44.4.1 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.44.4.2 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.44.4.3 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.44.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.44.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.44.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.44.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex A spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.44.5 – Standard information field – ITU-T G.992.5 Annex A transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex A transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.44.7 – Standard information field – ITU-T G.992.5 Annex A downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex A downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.44.8 – Standard information field – ITU-T G.992.5 Annex A upstream overhead data rate NPar(3) coding

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream overhead data rate NPar(3)s
x x	x x x x x x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.44.9 – Standard information field – ITU-T G.992.5 Annex A maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
x x	x x x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x x	x x x	Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.44.9.1 – Standard information field – ITU-T G.992.5 Annex A maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.44.10 – Standard information field – ITU-T G.992.5 Annex A maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x x	x x x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x x	x x x	Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.44.10.1 – Standard information field – ITU-T G.992.5 Annex A maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.44.12 – Standard information field – ITU-T G.992.5 Annex A number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x X	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.44.13 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.13.1 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.13.2 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.13.3 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.13.4 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.13.5 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.13.6 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.13.7 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.13.8 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.13.9 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.14 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.14.1 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.14.2 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.14.3 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.14.4 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.14.5 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.14.6 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.14.7 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.14.8 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.14.9 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.15 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.15.1 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.15.2 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.15.3 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.15.4 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.15.5 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.15.6 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.15.7 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.44.15.8 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.15.9 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.16 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.16.1 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.16.2 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.16.3 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.16.4 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.16.5 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.16.6 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.16.7 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.44.16.8 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.16.9 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.17 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.17.1 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.17.2 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.17.3 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.17.4 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.17.5 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.17.6 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.17.7 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.17.8 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.17.9 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.17.10 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.18 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.18.1 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.18.2 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.18.3 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.18.4 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.18.5 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.18.6 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.18.7 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.18.8 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.18.9 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.18.10 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.19 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.19.1 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.19.2 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.19.3 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.19.4 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.19.5 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.20 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.20.1 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.20.2 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.44.21 – Standard information field – ITU-T G.992.5 AnnexA downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #0 RTX NPar(3)
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.22 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #0 RTX NPar(3)
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.25 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.25.1 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.25.2 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.25.3 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.25.4 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.25.5 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.25.6 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.25.7 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.25.8 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.25.9 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.26 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.26.1 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.26.2 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.26.3 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.26.4 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.26.5 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.26.6 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.26.7 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.26.8 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.26.9 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.27 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.27.1 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.27.2 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.27.3 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.27.4 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.27.5 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.27.6 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.27.7 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.44.27.8 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.27.9 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #1 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.28 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.28.1 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.28.2 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.28.3 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.28.4 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.28.5 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.28.6 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.28.7 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.44.28.8 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.28.9 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #1 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.29 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.29.1 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.29.2 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.29.3 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.29.4 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.29.5 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.29.6 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.29.7 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.29.8 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.29.9 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.29.10 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.30 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.30.1 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.30.2 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.30.3 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.30.4 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.30.5 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.30.6 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.30.7 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.30.8 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.30.9 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.30.10 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.31 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.31.1 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.31.2 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.31.3 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.44.32 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.32.1 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.32.2 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.32.3 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.44.37 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.37.1 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.37.2 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.37.3 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.37.4 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.37.5 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.37.6 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.37.7 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.37.8 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.37.9 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.38 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.38.1 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.38.2 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.38.3 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.38.4 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.38.5 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.38.6 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.38.7 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.38.8 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.38.9 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream STM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.39 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.39.1 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.39.2 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.39.3 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.39.4 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.39.5 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.39.6 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.39.7 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.44.39.8 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.39.9 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.40 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.40.1 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.40.2 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.40.3 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.40.4 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.40.5 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.40.6 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.40.7 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.44.40.8 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.40.9 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.41 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.41.1 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.41.2 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.41.3 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.41.4 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.41.5 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.41.6 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.41.7 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.41.8 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.41.9 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.41.10 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A downstream PTM TPS-TC #2 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.42 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.42.1 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.42.2 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.42.3 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.42.4 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.42.5 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.42.6 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.42.7 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.44.42.8 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.42.9 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.42.10 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.43 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.43.1 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.43.2 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.43.3 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.44.44 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.44.1 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.44.2 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.44.44.3 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.44.49 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.49.1 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.49.2 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.49.3 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.49.4 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.49.5 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.49.6 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.49.7 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.49.8 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.49.9 – Standard information field – ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A downstream STM TPS-TC #3 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.44.50 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.50.1 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.50.2 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.50.3 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.50.4 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.50.5 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.50.6 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.50.7 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.50.8 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.50.9 – Standard information field – ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.51 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.51.1 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.51.2 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.51.3 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.51.4 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.51.5 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.51.6 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.51.7 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.44.51.8 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.51.9 – Standard information field – ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.52 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.52.1 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.52.2 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.52.3 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.52.4 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.52.5 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.52.6 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.52.7 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.44.52.8 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.52.9 – Standard information field – ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.53 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.53.1 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.53.2 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.53.3 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.53.4 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.53.5 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.53.6 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.53.7 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.44.53.8 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.53.9 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.53.10 – Standard information field – ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.54 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.44.54.1 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.44.54.2 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.54.3 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.54.4 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.44.54.5 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.44.54.6 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.44.54.7 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.44.54.8 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.44.54.9 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.44.54.10 – Standard information field – ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex A upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.44.55 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.55.1 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.55.2 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.55.3 – Standard information field – ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.44.56 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.44.56.1 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.44.56.2 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.44.56.3 – Standard information field – ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex A upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.23 ITU-T G.992.5 Annex B Par(2)/Par(3) parameters

Table 11.45 – Standard information field – ITU-T G.992.5 Annex B NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex B NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Tones 1 to 32
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.45.1 – Standard information field – ITU-T G.992.5 Annex B NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex B NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.1 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.2 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.3 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.4 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.5 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.6 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.7 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.8 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 9

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.0.9 – Standard information field – ITU-T G.992.5 Annex B SPar(2) coding – Octet 10

Bits								ITU-T G.992.5 Annex B SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.1 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.46.1.1 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.46.1.2 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.46.1.3 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.46.1.4 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.46.1.5 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.46.2 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.46.2.1 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.46.2.2 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.46.2.3 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.46.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.46.3 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDds (bits 9 to 7)

Table 11.46.3.1 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDds (bits 6 to 1)

Table 11.46.3.2 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDds (bits 9 to 7)

Table 11.46.3.3 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.46.3.4 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.46.3.5 – Standard information field – ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.46.4 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.46.4.1 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.46.4.2 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.46.4.3 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.46.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.46.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex B spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" $\log_tss_i$ (bits 6 to 1)

Table 11.46.5 – Standard information field – ITU-T G.992.5 Annex B transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex B transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.46.7 – Standard information field – ITU-T G.992.5 Annex B downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex B downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.46.8 – Standard information field – ITU-T G.992.5 Annex B upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex B upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.46.9 – Standard information field – ITU-T G.992.5 Annex B maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.46.9.1 – Standard information field – ITU-T G.992.5 Annex B maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.46.10 – Standard information field – ITU-T G.992.5 Annex B maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.46.10.1 – Standard information field – ITU-T G.992.5 Annex B maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.46.12 – Standard information field – ITU-T G.992.5 Annex B number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	X	*NBPds* (coded in bits 1 to 5)
x	x	x						Reserved for allocation by ITU-T

Table 11.46.13 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.13.1 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.13.2 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.13.3 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.13.4 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.13.5 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.13.6 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.13.7 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.13.8 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.13.9 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.46.14 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.14.1 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.14.2 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.14.3 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.14.4 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.14.5 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.14.6 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.14.7 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.14.8 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.14.9 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.15 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.15.1 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.15.2 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.15.3 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.15.4 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.15.5 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.15.6 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.15.7 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.46.15.8 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.15.9 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.16 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.16.1 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.16.2 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.16.3 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.16.4 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.16.5 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.16.6 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.16.7 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.46.16.8 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.16.9 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.17 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.17.1 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.17.2 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.17.3 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.17.4 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.17.5 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.17.6 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.17.7 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.17.8 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.17.9 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.17.10 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.18 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.18.1 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.18.2 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.18.3 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.18.4 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.18.5 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.18.6 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.18.7 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x x	Error_max (maximum bit error ratio)
x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	Reserved for allocation by ITU-T
x x	Reserved for allocation by ITU-T

Table 11.46.18.8 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.18.9 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.18.10 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.19 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.19.1 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.19.2 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.19.3 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.19.4 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.19.5 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.20 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.20.1 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.20.2 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.46.21 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.22 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.25 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.25.1 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.25.2 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.25.3 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.25.4 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.25.5 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.25.6 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.25.7 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.25.8 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.25.9 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.26 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.26.1 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.26.2 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.26.3 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.26.4 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.26.5 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.26.6 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.26.7 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.46.26.8 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.26.9 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.27 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.27.1 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.27.2 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.27.3 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.27.4 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.27.5 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.27.6 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.27.7 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.46.27.8 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.27.9 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.28 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.28.1 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.28.2 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.28.3 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.28.4 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.28.5 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.28.6 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.28.7 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.46.28.8 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.28.9 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.29 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.29.1 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.29.2 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.29.3 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.29.4 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.29.5 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.29.6 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.29.7 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.29.8 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.29.9 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.29.10 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.30 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.30.1 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.30.2 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.30.3 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.30.4 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.30.5 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.30.6 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.30.7 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.30.8 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.30.9 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.30.10 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.31 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.31.1 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.31.2 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.31.3 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.46.32 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.32.1 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.32.2 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.32.3 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B upstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.46.37 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.37.1 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.37.2 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.37.3 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.37.4 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.37.5 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.37.6 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.37.7 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.37.8 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.37.9 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.38 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.38.1 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.38.2 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.38.3 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.38.4 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.38.5 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.38.6 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.38.7 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.38.8 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.38.9 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.39 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.39.1 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.39.2 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.39.3 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.39.4 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.39.5 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.39.6 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.39.7 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.46.39.8 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.39.9 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.46.40 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.40.1 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.40.2 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.40.3 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.40.4 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.40.5 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.40.6 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.40.7 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.46.40.8 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.40.9 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.41 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.41.1 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.41.2 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.41.3 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.41.4 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.41.5 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.41.6 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.41.7 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.41.8 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.41.9 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.41.10 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.42 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.42.1 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.42.2 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.42.3 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.42.4 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.42.5 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.42.6 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.42.7 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.42.8 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.42.9 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.42.10 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.43 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.43.1 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.43.2 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.43.3 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4	3 2 1	ITU-T G.992.5 Annex B downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x		x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x		Reserved for allocation by ITU-T

Table 11.46.44 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.44.1 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.44.2 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.46.44.3 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.46.49 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.49.1 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.49.2 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.49.3 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.49.4 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.49.5 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.49.6 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.49.7 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 8
x x	1 1 1 1 x x	Error_max (maximum bit error ratio)
x x	1 1 x x 1 1	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	1 x 1 1 1 1	INP_no_erasure_not_required
x x	x 1 1 1 1 1	Reserved for allocation by ITU-T

Table 11.46.49.8 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.49.9 – Standard information field – ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream STM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.50 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.50.1 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.50.2 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.50.3 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.50.4 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.50.5 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.50.6 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.50.7 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.50.8 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.50.9 – Standard information field – ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.51 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.51.1 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.51.2 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.51.3 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.51.4 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.51.5 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.51.6 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.51.7 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.46.51.8 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.51.9 – Standard information field – ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.52 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.52.1 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.52.2 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.52.3 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.52.4 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.52.5 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.52.6 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.52.7 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.46.52.8 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.52.9 – Standard information field – ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.53 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.53.1 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.53.2 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.53.3 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.53.4 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.53.5 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.53.6 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.53.7 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.46.53.8 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.53.9 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.53.10 – Standard information field – ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.54 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.46.54.1 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.46.54.2 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.54.3 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.54.4 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.46.54.5 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.46.54.6 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.46.54.7 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.46.54.8 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.46.54.9 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.46.54.10 – Standard information field – ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex B upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.46.55 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.55.1 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.55.2 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.55.3 – Standard information field – ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B downstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.46.56 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.46.56.1 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.46.56.2 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.46.56.3 – Standard information field – ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex B upstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.24 ITU-T G.992.5 Annex I Par(2)/Par(3) parameters

Table 11.47 – Standard information field – ITU-T G.992.5 Annex I NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex I NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.47.1 – Standard information field – ITU-T G.992.5 Annex I NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex I NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.1 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.2 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.3 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.4 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.5 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.6 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.7 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.8 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 9

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.0.9 – Standard information field – ITU-T G.992.5 Annex I SPar(2) coding – Octet 10

Bits								ITU-T G.992.5 Annex I SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.1 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.48.1.1 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.48.1.2 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.48.1.3 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.48.1.4 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.48.1.5 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.48.2 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.48.2.1 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.48.2.2 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.48.2.3 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.48.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.48.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.48.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.48.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.48.3 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.48.3.1 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.48.3.2 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.48.3.3 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.48.3.4 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.48.3.5 – Standard information field – ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.48.4 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.48.4.1 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.48.4.2 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.48.4.3 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.48.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.48.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.48.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.48.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex I spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.48.5 – Standard information field – ITU-T G.992.5 Annex I transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex I transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.48.7 – Standard information field – ITU-T G.992.5 Annex I downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex I downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.48.8 – Standard information field – ITU-T G.992.5 Annex I upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex I upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.48.9 – Standard information field – ITU-T G.992.5 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.48.9.1 – Standard information field – ITU-T G.992.5 Annex I maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.48.10 – Standard information field – ITU-T G.992.5 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x x	x x x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x x	x x x	Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.48.10.1 – Standard information field – ITU-T G.992.5 Annex I maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
x x	x x x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x x	x x x	Reserved for allocation by ITU-T

Table 11.48.12 – Standard information field – ITU-T G.992.5 Annex I number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.48.13 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.13.1 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.13.2 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.13.3 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.13.4 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.13.5 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.13.6 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.13.7 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.13.8 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.13.9 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.14 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.14.1 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.14.2 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.14.3 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.14.4 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.14.5 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.14.6 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.14.7 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.14.8 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.14.9 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.15 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.15.1 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.15.2 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.15.3 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.15.4 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.15.5 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.15.6 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.15.7 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.48.15.8 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.15.9 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.16 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.16.1 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.16.2 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.16.3 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.16.4 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.16.5 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.16.6 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.16.7 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.48.16.8 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.16.9 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.17 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.17.1 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.17.2 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.17.3 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.17.4 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.17.5 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.17.6 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.17.7 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.17.8 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.17.9 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.17.10 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.18 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.18.1 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.18.2 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.18.3 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.18.4 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.18.5 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.18.6 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.18.7 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.48.18.8 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.18.9 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.18.10 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.19 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.19.1 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.19.2 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.19.3 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.19.4 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.19.5 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.20 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.20.1 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.20.2 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #0 NPar(3)s – Octet 3
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.48.21 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #0 RTX NPar(3)
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.22 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #0 RTX NPar(3)
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.25 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.25.1 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.25.2 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.25.3 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.25.4 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.25.5 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.25.6 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.25.7 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.25.8 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.25.9 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.26 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.26.1 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.26.2 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.26.3 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.26.4 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.26.5 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.26.6 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.26.7 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.26.8 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.26.9 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.27 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.27.1 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.27.2 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.27.3 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.27.4 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.27.5 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.27.6 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.27.7 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.48.27.8 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.27.9 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.28 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.28.1 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.28.2 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.28.3 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.28.4 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.28.5 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.28.6 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.28.7 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.48.28.8 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.28.9 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.29 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.29.1 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.29.2 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.29.3 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.29.4 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.29.5 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.29.6 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.29.7 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.29.8 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.29.9 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.29.10 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #1 NPar(3)s – Octet 11
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.48.30 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.30.1 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.30.2 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.30.3 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.30.4 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.30.5 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.30.6 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.30.7 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.30.8 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.30.9 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.30.10 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.31 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.31.1 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.31.2 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.31.3 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.48.32 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.32.1 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.32.2 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.32.3 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.48.37 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.37.1 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.37.2 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.37.3 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.37.4 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.37.5 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.37.6 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.37.7 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.37.8 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.37.9 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.38 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.38.1 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.38.2 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.38.3 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.38.4 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.38.5 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.38.6 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.38.7 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.38.8 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.38.9 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream STM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.39 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.39.1 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.39.2 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.39.3 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.39.4 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.39.5 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.39.6 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.39.7 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.48.39.8 – Standard information field – ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.39.9 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.40 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.40.1 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.40.2 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.40.3 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.40.4 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.40.5 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.40.6 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.40.7 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 8
x x		x x	Error_max (maximum bit error ratio)
x x		x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		x			Reserved for allocation by ITU-T
x x	x				IMA_flag

Table 11.48.40.8 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.40.9 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream ATM TPS-TC #2 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.48.41 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.41.1 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.41.2 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.41.3 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.41.4 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.41.5 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.41.6 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.41.7 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.41.8 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.41.9 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.41.10 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.42 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.42.1 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.42.2 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.42.3 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.42.4 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.42.5 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.42.6 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.42.7 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.42.8 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.42.9 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.42.10 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.43 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.43.1 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.43.2 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.43.3 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4	3 2 1	ITU-T G.992.5 Annex I downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x		x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x		Reserved for allocation by ITU-T

Table 11.48.44 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.44.1 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.44.2 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.48.44.3 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4	3 2 1	ITU-T G.992.5 Annex I upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x		x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x		Reserved for allocation by ITU-T

Table 11.48.49 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.49.1 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.49.2 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.49.3 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.49.4 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.49.5 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.49.6 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.49.7 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.49.8 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.49.9 – Standard information field – ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.50 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.50.1 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.50.2 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.50.3 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.50.4 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.50.5 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.50.6 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.50.7 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.50.8 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.50.9 – Standard information field – ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.51 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.51.1 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.51.2 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.51.3 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.51.4 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.51.5 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.51.6 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.51.7 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.48.51.8 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.51.9 – Standard information field – ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.52 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.52.1 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.52.2 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.52.3 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.52.4 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.52.5 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.52.6 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.52.7 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.48.52.8 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.52.9 – Standard information field – ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.53 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.53.1 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.53.2 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.53.3 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.53.4 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.53.5 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.53.6 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.53.7 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.48.53.8 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.53.9 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.53.10 – Standard information field – ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.54 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.48.54.1 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.48.54.2 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.54.3 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.54.4 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.48.54.5 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.48.54.6 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.48.54.7 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.48.54.8 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.48.54.9 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.48.54.10 – Standard information field – ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex I upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.48.55 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.55.1 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.55.2 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.55.3 – Standard information field – ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.48.56 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.48.56.1 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.48.56.2 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.48.56.3 – Standard information field – ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex I upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.25 ITU-T G.992.3 Annex M Par(2)/Par(3) parameters

Table 11.49 – Standard information field – ITU-T G.992.3 Annex M NPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex M NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	PSD shape support
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.49.1 – Standard information field – ITU-T G.992.3 Annexes M NPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annexes M NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	X	0	0	0	0	0	0	No parameters in this octet

Table 11.50 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 1

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Submode PSD masks
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.1 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 2

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Submode PSD shape
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.2 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 3

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.3 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 4

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.4 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 5

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.5 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 6

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.6 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 7

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.7 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 8

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.8 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 9

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.0.9 – Standard information field – ITU-T G.992.3 Annex M SPar(2) coding – Octet 10

Bits								ITU-T G.992.3 Annex M SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.1 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.50.1.1 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.50.1.2 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.50.1.3 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.50.1.4 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.50.1.5 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.50.2 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.50.2.1 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.50.2.2 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.50.2.3 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.50.2.4*(j-1) – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.50.2.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.50.2.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.50.2.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.50.3 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.50.3.1 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.50.3.2 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.50.3.3 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.50.3.4 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.50.3.5 – Standard information field – ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.50.4 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.50.4.1 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.50.4.2 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.50.4.3 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.50.4.4*(j-1) – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.50.4.4*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.50.4.4*(j-1)+2 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.50.4.4*(j-1)+3 – Standard information field – ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.3 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.50.5 – Standard information field – ITU-T G.992.3 Annex M transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.3 Annex M transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.50.6 – Standard information field – ITU-T G.992.3 Annex M submode PSD mask NPar(3) – Octet 1

Bits								ITU-T G.992.3 Annex M submode PSD mask NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-32 supported
x	x	x	x	x	x	1	x	EU-36 supported
x	x	x	x	x	1	x	x	EU-40 supported
x	x	x	x	1	x	x	x	EU-44 supported
x	x	x	1	x	x	x	x	EU-48 supported
x	x	1	x	x	x	x	x	EU-52 supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.6.1 – Standard information field – ITU-T G.992.3 Annex M submode PSD mask NPar(3) – Octet 2

Bits								ITU-T G.992.3 Annex M submode PSD mask NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-56 supported
x	x	x	x	x	x	1	x	EU-60 supported
x	x	x	x	x	1	x	x	EU-64 supported
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.7 – Standard information field – ITU-T G.992.3 Annex M downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex M downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.50.8 – Standard information field – ITU-T G.992.3 Annex M upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.3 Annex M upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.50.9 – Standard information field – ITU-T G.992.3 Annex M maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.50.9.1 – Standard information field – ITU-T G.992.3 Annex M maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.50.10 – Standard information field – ITU-T G.992.3 Annex M maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.50.10.1 – Standard information field – ITU-T G.992.3 Annex M maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.50.11 – Standard information field – ITU-T G.992.3 Annex M submode PSD shape NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M submode PSD shape NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Tone index n (bit 6 to 1, coded as n-1)

Table 11.50.11.1 – Standard information field – ITU-T G.992.3 Annex M submode PSD shape NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M submode PSD shape NPar(3)s – Octet 2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)

Table 11.50.11.2*(j-1) – Standard information field – ITU-T G.992.3 Annex M submode PSD shape NPar(3) coding – Octet 2*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M submode PSD shape NPar(3)s – Octet 2*(j-1)+1
x x	x x x x x x	Tone index n (bit 6 to 1, coded as n-1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.50.11.2*(j-1)+1 – Standard information field – ITU-T G.992.3 Annex M submode PSD shape NPar(3) coding – Octet 2*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M submode PSD shape NPar(3)s – Octet 2*(j-1)+2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.50.12 – Standard information field – ITU-T G.992.3 Annex M number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.50.13 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.13.1 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.13.2 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.13.3 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.13.4 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.13.5 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.13.6 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.13.7 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	INP_no_erasure_not_required
x x	x	Reserved for allocation by ITU-T

Table 11.50.13.8 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.13.9 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.14 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.14.1 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.14.2 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.14.3 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.14.4 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.14.5 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.14.6 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.14.7 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.14.8 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.14.9 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.15 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.15.1 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.15.2 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.15.3 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.15.4 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.15.5 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.15.6 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.15.7 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.50.15.8 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.15.9 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.16 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.16.1 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.16.2 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.16.3 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.16.4 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.16.5 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.16.6 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.16.7 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.50.16.8 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.16.9 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.17 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.17.1 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.17.2 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.17.3 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.17.4 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.17.5 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.17.6 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.17.7 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.17.8 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.17.9 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.17.10 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.18 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.18.1 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.18.2 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.18.3 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.18.4 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.18.5 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.18.6 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.18.7 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.18.8 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.18.9 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.18.10 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.19 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.19.1 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.19.2 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.19.3 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.19.4 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.19.5 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.20 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.20.1 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.20.2 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.50.21 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.22 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.25 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.25.1 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.25.2 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.25.3 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.25.4 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.25.5 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.25.6 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.25.7 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.25.8 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.25.9 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.26 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.26.1 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.26.2 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.26.3 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.26.4 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.26.5 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.26.6 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.26.7 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.26.8 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.26.9 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.27 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.27.1 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.27.2 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.27.3 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.27.4 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.27.5 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.27.6 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.27.7 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.50.27.8 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.27.9 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.28 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.28.1 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.28.2 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.28.3 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.28.4 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.28.5 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.28.6 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.28.7 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.50.28.8 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.28.9 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.29 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.29.1 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.29.2 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.29.3 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.29.4 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.29.5 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.29.6 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.29.7 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.29.8 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.29.9 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.29.10 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.30 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.30.1 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.30.2 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.30.3 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.30.4 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.30.5 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.30.6 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.30.7 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.30.8 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.30.9 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.30.10 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.31 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.31.1 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.31.2 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.31.3 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.50.32 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.32.1 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.32.2 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.32.3 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.50.37 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.37.1 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.37.2 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.37.3 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.37.4 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.37.5 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.37.6 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.37.7 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.37.8 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.37.9 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.38 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.38.1 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.38.2 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.38.3 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.38.4 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.38.5 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.38.6 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.38.7 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.38.8 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.38.9 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.39 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.39.1 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.39.2 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.39.3 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.39.4 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.39.5 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.39.6 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.39.7 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	INP_no_erasure_not_required
x x	x	IMA_flag

Table 11.50.39.8 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.39.9 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.40 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.40.1 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.40.2 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.40.3 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.40.4 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.40.5 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.40.6 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.40.7 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.50.40.8 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.40.9 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.41 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.41.1 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.41.2 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.41.3 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.41.4 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.41.5 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.41.6 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.41.7 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.41.8 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.41.9 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.41.10 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.42 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.42.1 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.42.2 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.42.3 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.42.4 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.42.5 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.42.6 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.42.7 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.50.42.8 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x x	x x x x x x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.42.9 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.42.10 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.43 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.43.1 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M A downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.43.2 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.43.3 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.50.44 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.44.1 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.44.2 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.50.44.3 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.50.49 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.49.1 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.49.2 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.49.3 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.49.4 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.49.5 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.49.6 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.49.7 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.49.8 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.49.9 – Standard information field – ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.50 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.50.1 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.50.2 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.50.3 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.50.4 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.50.5 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.50.6 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.50.7 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.50.8 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.50.9 – Standard information field – ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.51 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.51.1 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.51.2 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.51.3 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.51.4 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.51.5 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.51.6 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.51.7 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.50.51.8 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.51.9 – Standard information field – ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.52 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.52.1 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.52.2 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.52.3 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.52.4 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.52.5 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.52.6 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.52.7 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.50.52.8 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.52.9 – Standard information field – ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.53 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.53.1 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.53.2 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.53.3 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.53.4 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.53.5 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.53.6 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.53.7 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.50.53.8 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.53.9 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.53.10 – Standard information field – ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.54 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.50.54.1 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.50.54.2 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.54.3 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.54.4 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.50.54.5 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.50.54.6 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.50.54.7 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.50.54.8 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.50.54.9 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.50.54.10 – Standard information field – ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.3 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.50.55 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.55.1 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.55.2 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.55.3 – Standard information field – ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.50.56 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.50.56.1 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.50.56.2 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.50.56.3 – Standard information field – ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.3 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.26 ITU-T G.992.5 Annex J Par(2)/Par(3) parameters

Table 11.51 – Standard information field – ITU-T G.992.5 Annex J NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex J NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.51.1 – Standard information field – ITU-T G.992.5 Annex J NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex J NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Submode PSD masks
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.1 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Submode PSD shape
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.2 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.3 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.4 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.5 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.6 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.7 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.8 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 9

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.0.9 – Standard information field – ITU-T G.992.5 Annex J SPar(2) coding – Octet 10

Bits								ITU-T G.992.5 Annex J SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.1 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.52.1.1 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.52.1.2 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.52.1.3 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.52.1.4 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.52.1.5 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.52.2 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.52.2.1 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.52.2.2 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.52.2.3 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.52.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.52.3 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDds (bits 9 to 7)

Table 11.52.3.1 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDds (bits 6 to 1)

Table 11.52.3.2 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDds (bits 9 to 7)

Table 11.52.3.3 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDds (bits 6 to 1)

Table 11.52.3.4 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPds (bits 9 to 7)

Table 11.52.3.5 – Standard information field – ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J spectrum bounds downstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPds (bits 6 to 1)

Table 11.52.4 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.52.4.1 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.52.4.2 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.52.4.3 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.52.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex J spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.52.5 – Standard information field – ITU-T G.992.5 Annex J transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex J transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.52.6 – Standard information field – ITU-T G.992.5 Annex J submode PSD masks NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J submode PSD masks NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-32 supported
x	x	x	x	x	x	1	x	ADLU-36 supported
x	x	x	x	x	1	x	x	ADLU-40 supported
x	x	x	x	1	x	x	x	ADLU-44 supported
x	x	x	1	x	x	x	x	ADLU-48 supported
x	x	1	x	x	x	x	x	ADLU-52 supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.6.1 – Standard information field – ITU-T G.992.5 Annex J submode PSD masks NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J submode PSD masks NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-56 supported
x	x	x	x	x	x	1	x	ADLU-60 supported
x	x	x	x	x	1	x	x	ADLU-64 supported
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.7 – Standard information field – ITU-T G.992.5 Annex J downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex J downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.52.8 – Standard information field – ITU-T G.992.5 Annex J upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex J upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.52.9 – Standard information field – ITU-T G.992.5 Annex J maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.52.9.1 – Standard information field – ITU-T G.992.5 Annex J maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.52.10 – Standard information field – ITU-T G.992.5 Annex J maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.52.10.1 – Standard information field – ITU-T G.992.5 Annex J maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.52.11 – Standard information field – ITU-T G.992.5 Annex J submode PSD shape NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J submode PSD shape NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Tone index n (bit 6 to 1, coded as n-1)

Table 11.52.11.1 – Standard information field – ITU-T G.992.5 Annex J submode PSD shape NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J submode PSD shape NPar(3)s – Octet 2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)

Table 11.52.11.2*(j-1) – Standard information field – ITU-T G.992.5 Annex J submode PSD shape NPar(3) coding – Octet 2*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J submode PSD shape NPar(3)s – Octet 2*(j-1)+1
x x	x x x x x x	Tone index n (bit 6 to 1, coded as n-1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.11.2*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex J submode PSD shape NPar(3) coding – Octet 2*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J submode PSD shape NPar(3)s – Octet 2*(j-1)+2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.52.12 – Standard information field – ITU-T G.992.5 Annex J number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x X	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.52.13 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.13.1 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.13.2 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 3

x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.13.3 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.13.4 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.13.5 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.13.6 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.13.7 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.13.8 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.13.9 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.14 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.14.1 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.14.2 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.14.3 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.14.4 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.14.5 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.14.6 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.14.7 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.14.8 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.14.9 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.15 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.15.1 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.15.2 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.15.3 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.15.4 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.15.5 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.15.6 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.15.7 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.52.15.8 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.15.9 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.16 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.16.1 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.16.2 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.16.3 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.16.4 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.16.5 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.16.6 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.16.7 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.52.16.8 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.16.9 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.17 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.17.1 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.17.2 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.17.3 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.17.4 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.17.5 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.17.6 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.17.7 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.17.8 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.17.9 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.17.10 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.18 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.18.1 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.18.2 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.18.3 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.18.4 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.18.5 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.18.6 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.18.7 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x x	1 1 1 1 x x	Error_max (maximum bit error ratio)
x x	1 1 x x 1 1	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	1 x 1 1 1 1	Reserved for allocation by ITU-T
x x	x 1 1 1 1 1	Reserved for allocation by ITU-T

Table 11.52.18.8 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.18.9 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.18.10 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.19 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.19.1 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.19.2 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.19.3 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.19.4 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.19.5 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.20 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.20.1 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.20.2 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.52.21 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.22 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.25 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.25.1 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.25.2 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.25.3 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.25.4 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.25.5 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.25.6 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.25.7 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.25.8 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.25.9 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.26 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.26.1 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.26.2 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.26.3 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.26.4 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.26.5 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.26.6 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.26.7 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.26.8 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.26.9 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.27 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.27.1 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.27.2 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.27.3 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.27.4 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.27.5 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.27.6 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.27.7 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.52.27.8 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.27.9 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.28 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.28.1 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.28.2 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.28.3 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.28.4 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.28.5 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.28.6 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.28.7 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 8
x x	. . . . x x	Error_max (maximum bit error ratio)
x x	. . x x . .	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	. x	Reserved for allocation by ITU-T
x x	x	IMA_flag

Table 11.52.28.8 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.28.9 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.29 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.29.1 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.29.2 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.29.3 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.29.4 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.29.5 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.29.6 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.29.7 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.29.8 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.29.9 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.29.10 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.30 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.30.1 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.30.2 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.30.3 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.30.4 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.30.5 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.30.6 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.30.7 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.30.8 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.30.9 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.30.10 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.31 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.31.1 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.31.2 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.31.3 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.52.32 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.32.1 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.32.2 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.32.3 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.52.37 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.37.1 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.37.2 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.37.3 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.37.4 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.37.5 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.37.6 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.37.7 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.37.8 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.37.9 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.38 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.38.1 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.38.2 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.38.3 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.38.4 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.38.5 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.38.6 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.38.7 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.38.8 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.38.9 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.39 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.39.1 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.39.2 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.39.3 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.39.4 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.39.5 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.39.6 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.39.7 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.52.39.8 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.39.9 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.40 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.40.1 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.40.2 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.40.3 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.40.4 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.40.5 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.40.6 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.40.7 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.52.40.8 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.40.9 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.41 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.41.1 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.41.2 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.41.3 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.41.4 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.41.5 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.41.6 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.41.7 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.41.8 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.41.9 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.41.10 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.42 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.42.1 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.42.2 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.42.3 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.42.4 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.42.5 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.42.6 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.42.7 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.42.8 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.42.9 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.42.10 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.43 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.43.1 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J A downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.43.2 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.43.3 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.52.44 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.44.1 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.44.2 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.52.44.3 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.52.49 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.49.1 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.49.2 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.49.3 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.49.4 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.49.5 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.49.6 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.49.7 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.49.8 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.49.9 – Standard information field – ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream STM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.50 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.50.1 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.50.2 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.50.3 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.50.4 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.50.5 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.50.6 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.50.7 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.52.50.8 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.50.9 – Standard information field – ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.51 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.51.1 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.51.2 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.51.3 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.51.4 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.51.5 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.51.6 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.51.7 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 8
x x	1 1 1 1 x x	Error_max (maximum bit error ratio)
x x	1 1 x x 1 1	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	1 x 1 1 1 1	INP_no_erasure_not_required
x x	x 1 1 1 1 1	IMA_flag

Table 11.52.51.8 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.51.9 – Standard information field – ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J downstream ATM TPS-TC #3 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.52 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.52.1 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.52.2 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.52.3 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.52.4 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.52.5 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.52.6 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.52.7 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.52.52.8 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.52.9 – Standard information field – ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.53 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.53.1 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.53.2 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.53.3 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.53.4 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.53.5 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.53.6 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.53.7 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.52.53.8 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.53.9 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.53.10 – Standard information field – ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.54 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.52.54.1 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.52.54.2 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.54.3 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.54.4 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.52.54.5 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.52.54.6 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.52.54.7 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 8
x x	x x	Error_max (maximum bit error ratio)
x x	x x	INP_min (minimum impulse noise protection) (bits 2 and 1)
x x	x	Reserved for allocation by ITU-T
x x	x	Reserved for allocation by ITU-T

Table 11.52.54.8 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.52.54.9 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.52.54.10 – Standard information field – ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex J upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.52.55 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.55.1 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.55.2 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.55.3 – Standard information field – ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.52.56 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.52.56.1 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.52.56.2 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.52.56.3 – Standard information field – ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex J upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.27

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9.4.29 ITU-T G.992.5 Annex M Par(2)/Par(3) parameters

Table 11.57 – Standard information field – ITU-T G.992.5 Annex M NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex M NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Short initialization
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.57.1 – Standard information field – ITU-T G.992.5 Annex M NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex M NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Support of downstream virtual noise in diagnostics mode
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Submode PSD masks
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.1 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Submode PSD shape
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.2 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #0
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #0
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #0
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #0
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.3 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0 RETX
x	x	x	x	1	x	x	x	Downstream PTM TPS-TC #0 RETX
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.4 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #1
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #1
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #1
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #1
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.5 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.6 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #2
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #2
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #2
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #2
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.7 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.8 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 9

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream STM TPS-TC #3
x	x	x	x	x	x	1	x	Upstream STM TPS-TC #3
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Downstream PTM TPS-TC #3
x	x	1	x	x	x	x	x	Upstream PTM TPS-TC #3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.0.9 – Standard information field – ITU-T G.992.5 Annex M SPar(2) coding – Octet 10

Bits								ITU-T G.992.5 Annex M SPar(2)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.1 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.58.1.1 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.58.1.2 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.58.1.3 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.58.1.4 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.58.1.5 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.58.2 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.58.2.1 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.58.2.2 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.58.2.3 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.58.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.58.3 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.58.3.1 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.58.3.2 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.58.3.3 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.58.3.4 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.58.3.5 – Standard information field – ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.58.4 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.58.4.1 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.58.4.2 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.58.4.3 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 4
x x	x x x x x x	"First" log_tss_i (bits 6 to 1)

Table 11.58.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex M spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.58.5 – Standard information field – ITU-T G.992.5 Annex M transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex M transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.58.6 – Standard information field – ITU-T G.992.5 Annex M submode PSD masks NPar(3) – Octet 1

Bits								ITU-T G.992.5 Annex M submode PSD masks NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-32 supported
x	x	x	x	x	x	1	x	EU-36 supported
x	x	x	x	x	1	x	x	EU-40 supported
x	x	x	x	1	x	x	x	EU-44 supported
x	x	x	1	x	x	x	x	EU-48 supported
x	x	1	x	x	x	x	x	EU-52 supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.6.1 – Standard information field – ITU-T G.992.5 Annex M submode PSD masks NPar(3) – Octet 2

Bits								ITU-T G.992.5 Annex M submode PSD masks NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-56 supported
x	x	x	x	x	x	1	x	EU-60 supported
x	x	x	x	x	1	x	x	EU-64 supported
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.7 – Standard information field – ITU-T G.992.5 Annex M downstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex M downstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.58.8 – Standard information field – ITU-T G.992.5 Annex M upstream overhead data rate NPar(3) coding

Bits								ITU-T G.992.5 Annex M upstream overhead data rate NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.58.9 – Standard information field – ITU-T G.992.5 Annex M maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.58.9.1 – Standard information field – ITU-T G.992.5 Annex M maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of downstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.58.10 – Standard information field – ITU-T G.992.5 Annex M maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream STM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.58.10.1 – Standard information field – ITU-T G.992.5 Annex M maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x				x	x	x	Maximum number of upstream PTM TPS-TCs (n = 0 to 4)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.58.11 – Standard information field – ITU-T G.992.5 Annex M submode PSD shape NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M submode PSD shape NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Tone index n (bit 6 to 1, coded as n-1)

Table 11.58.11.1 – Standard information field – ITU-T G.992.5 Annex M submode PSD shape NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M submode PSD shape NPar(3)s – Octet 2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)

Table 11.58.11.2*(j-1) – Standard information field – ITU-T G.992.5 Annex M submode PSD shape NPar(3) coding – Octet 2*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M submode PSD shape NPar(3)s – Octet 2*(j-1)+1
x x	x x x x x x	Tone index n (bit 6 to 1, coded as n-1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.11.2*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex M submode PSD shape NPar(3) coding – Octet 2*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M submode PSD shape NPar(3)s – Octet 2*(j-1)+2
x x	x x x x x x	PSD at this tone index n (bit 6 to 1, coded as n)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.58.12 – Standard information field – ITU-T G.992.5 Annex M number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x	x x x x x	*NBPds* (coded in bits 1 to 5)
x x	x	Reserved for allocation by ITU-T

Table 11.58.13 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.13.1 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.13.2 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.13.3 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.13.4 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.13.5 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.13.6 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.13.7 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.13.8 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.13.9 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream STM TPS-TC #0 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.58.14 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.14.1 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.14.2 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.14.3 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.14.4 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.14.5 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.14.6 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.14.7 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.14.8 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.14.9 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.15 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.15.1 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.15.2 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.15.3 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.15.4 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.15.5 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.15.6 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.15.7 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 8
x x		Error_max (maximum bit error ratio)
x x		INP_min (minimum impulse noise protection) (bits 2 and 1)
x x		INP_no_erasure_not_required
x x	x	IMA_flag

Table 11.58.15.8 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.15.9 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.16 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.16.1 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.16.2 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.16.3 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.16.4 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.16.5 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.16.6 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.16.7 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.58.16.8 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.16.9 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.17 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.17.1 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.17.2 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.17.3 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.17.4 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.17.5 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.17.6 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.17.7 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.17.8 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.17.9 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.17.10 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.18 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.18.1 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.18.2 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.18.3 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.18.4 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.18.5 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.18.6 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.18.7 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.18.8 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.18.9 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.18.10 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.19 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.19.1 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.19.2 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.19.3 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.19.4 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.19.5 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.20 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.20.1 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.20.2 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream PMS-TC latency path #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x	x	x	x					0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.58.21 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	Reserved for allocation by ITU-T
x	x					x		Reserved for allocation by ITU-T
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.22 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 RTX NPar(3) coding

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #0 RTX NPar(3)
8	7	6	5	4	3	2	1	
x	x						x	64/65-octet encapsulation with short packets
x	x					x		64/65-octet encapsulation with pre-emption
x	x				x			Reserved for allocation by ITU-T
x	x			x				Reserved for allocation by ITU-T
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.25 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.25.1 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.25.2 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.25.3 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.25.4 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.25.5 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.25.6 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.25.7 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.25.8 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.25.9 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #1 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.26 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.26.1 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.26.2 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.26.3 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.26.4 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.26.5 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.26.6 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.26.7 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.26.8 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.26.9 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3) coding – Octet 10

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #1 NPar(3)s – Octet 10
x x	x x x x x 1	CIpolicy ZERO
x x	x x x x 1 x	CIpolicy ONE
x x	x x x 1 x x	CIpolicy TWO
x x	x x 1 x x x	Reserved for allocation by ITU-T
x x	x 1 x x x x	Reserved for allocation by ITU-T
x x	1 x x x x x	Reserved for allocation by ITU-T
x x	0 0 0 0 0 0	No parameters in this octet

Table 11.58.27 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.27.1 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.27.2 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.27.3 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.27.4 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.27.5 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.27.6 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.27.7 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.58.27.8 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.27.9 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.28 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.28.1 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.28.2 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.28.3 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.28.4 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.28.5 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.28.6 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.28.7 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.58.28.8 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.28.9 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.29 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.29.1 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.29.2 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.29.3 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.29.4 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.29.5 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.29.6 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.29.7 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.29.8 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.29.9 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.29.10 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream PTM TPS-TC #1 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.30 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.30.1 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.30.2 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.30.3 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.30.4 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.30.5 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.30.6 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.30.7 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.30.8 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.30.9 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.30.10 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.31 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.31.1 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.31.2 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.31.3 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.58.32 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.32.1 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.32.2 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.32.3 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.58.37 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.37.1 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.37.2 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.37.3 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.37.4 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.37.5 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.37.6 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.37.7 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.37.8 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.37.9 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.38 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.38.1 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.38.2 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.38.3 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.38.4 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.38.5 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 6
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.38.6 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 7
x x	x x x x x x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.38.7 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.38.8 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.38.9 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.39 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.39.1 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.39.2 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.39.3 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.39.4 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.39.5 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.39.6 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.39.7 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.58.39.8 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.39.9 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #2 NPar(3)s – Octet 10
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.40 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.40.1 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.40.2 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.40.3 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.40.4 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.40.5 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.40.6 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.40.7 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.58.40.8 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.40.9 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.41 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.41.1 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.41.2 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.41.3 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.41.4 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.41.5 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.41.6 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.41.7 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.41.8 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.41.9 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.41.10 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.42 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.42.1 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.42.2 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.42.3 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.42.4 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.42.5 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.42.6 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.42.7 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.42.8 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.42.9 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.42.10 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.43 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.43.1 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.43.2 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.43.3 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.58.44 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 1
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.44.1 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.44.2 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x x	x x x x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x x	x x	Reserved for allocation by ITU-T

Table 11.58.44.3 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x x	x x x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x x	x x x	Reserved for allocation by ITU-T

Table 11.58.49 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.49.1 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.49.2 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.49.3 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.49.4 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.49.5 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.49.6 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.49.7 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.49.8 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.49.9 – Standard information field – ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.50 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.50.1 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.50.2 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.50.3 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.50.4 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.50.5 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.50.6 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.50.7 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.50.8 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.50.9 – Standard information field – ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream STM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.51 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.51.1 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.51.2 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.51.3 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.51.4 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 5
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.51.5 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.51.6 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.51.7 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 8
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.58.51.8 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.51.9 – Standard information field – ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.52 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.52.1 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.52.2 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.52.3 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.52.4 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.52.5 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.52.6 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.52.7 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.58.52.8 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.52.9 – Standard information field – ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.53 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.53.1 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.53.2 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.53.3 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.53.4 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.53.5 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.53.6 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.53.7 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						Reserved for allocation by ITU-T

Table 11.58.53.8 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.53.9 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.53.10 – Standard information field – ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M downstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.54 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.58.54.1 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.58.54.2 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.54.3 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.54.4 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.58.54.5 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.58.54.6 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.58.54.7 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						Reserved for allocation by ITU-T

Table 11.58.54.8 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.58.54.9 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	HDLC encapsulation
x	x	x	x	x	x	1	x	Reserved by ITU-T
x	x	x	x	x	1	x	x	Reserved by ITU-T
x	x	x	x	1	x	x	x	64/65-octet encapsulation with short packets
x	x	x	1	x	x	x	x	64/65-octet encapsulation with pre-emption
x	x	1	x	x	x	x	x	64/65-octet encapsulation supported

Table 11.58.54.10 – Standard information field – ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex M upstream PTM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	CIpolicy TWO
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.58.55 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.55.1 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.55.2 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.55.3 – Standard information field – ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M downstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.58.56 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.58.56.1 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.58.56.2 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.58.56.3 – Standard information field – ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex M upstream PMS-TC latency path #3 NPar(3)s – Octet 4
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.30 ITU-T G.993.1 Par(2)/Par(3) parameters

Table 11.59 – Standard information field – ITU-T G.993.1 NPar(2) coding

Bits								ITU-T G.993.1 NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream use of optional band (OptUp)
x	x	x	x	x	x	1	x	Downstream use of optional band (OptDn)
x	x	x	x	x	1	x	x	PSD reduction (PSDRed)
x	x	x	x	1	x	x	x	PTM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.60 – Standard information field – ITU-T G.993.1 SPar(2) coding

Bits								ITU-T G.993.1 SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for use by ITU-T
x	x	x	x	x	x	1	x	Used bands in upstream (Note)
x	x	x	x	x	1	x	x	Used bands in downstream (Note)
x	x	x	x	1	x	x	x	IDFT/DFT size
x	x	x	1	x	x	x	x	Initial length of CE
x	x	1	x	x	x	x	x	RFI bands (Note)
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable and is a multiple of 4 octets. The length depends on the total number of bands "j" to be specified. "j" is the band index (starting from 1).

Table 11.60.2.4j-4 – Standard information field – ITU-T G.993.1 used bands in upstream NPar(3) coding – Octet 4j – 3 (j = 1, 2)

Bits								ITU-T G.993.1 used bands in upstream NPar(3)s – Octet 4j – 3 (j = 1, 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band j (bits 12 to 7)

Table 11.60.2.4j-3 – Standard information field – ITU-T G.993.1 used bands in upstream NPar(3) coding – Octet 4j – 2 (j = 1, 2)

Bits								ITU-T G.993.1 used bands in upstream NPar(3)s – Octet 4j – 2 (j = 1, 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band j (bits 6 to 1)

Table 11.60.2.4j-2 – Standard information field – ITU-T G.993.1 used bands in upstream NPar(3) coding – Octet 4j – 1 (j = 1, 2)

Bits								ITU-T G.993.1 used bands in upstream NPar(3)s – Octet 4j – 1 (j = 1, 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band j (bits 12 to 7)

Table 11.60.2.4j-1 – Standard information field – ITU-T G.993.1 used bands in upstream NPar(3) coding – Octet 4j (j = 1, 2)

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 used bands in upstream NPar(3)s – Octet 4j (j = 1, 2)
x x	x x x x x x	Start tone index of band j (bits 6 to 1)

Table 11.60.3.4j-4 – Standard information field – ITU-T G.993.1 used bands in downstream NPar(3) coding – Octet 4j – 3 (j = 1, 2)

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 used bands in downstream NPar(3)s – Octet 4j – 3 (j = 1, 2)
x x	x x x x x x	End tone index of band j (bits 12 to 7)

Table 11.60.3.4j-3 – Standard information field – ITU-T G.993.1 used bands in downstream NPar(3) coding – Octet 4j – 2 (j = 1, 2)

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 used bands in downstream NPar(3)s – Octet 4j – 2 (j = 1, 2)
x x	x x x x x x	End tone index of band j (bits 6 to 1)

Table 11.60.3.4j-2 – Standard information field – ITU-T G.993.1 used bands in downstream NPar(3) coding – Octet 4j – 1 (j = 1, 2)

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 used bands in downstream NPar(3)s – Octet 4j – 1 (j = 1, 2)
x x	x x x x x x	Start tone index of band j (bits 12 to 7)

Table 11.60.3.4j-1 – Standard information field – ITU-T G.993.1 used bands in downstream NPar(3) coding – Octet 4j (j = 1, 2)

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 used bands in downstream NPar(3)s – Octet 4j (j = 1, 2)
x x	x x x x x x	Start tone index of band j (bits 6 to 1)

Table 11.60.4 – Standard information field – ITU-T G.993.1 IDFT/DFT size NPar(3) coding

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 IDFT/DFT size NPar(3)s
x x	x x x x x x	IDFT/DFT size (bits 6-1 × 256 points)

Table 11.60.5 – Standard information field – ITU-T G.993.1 initial length of CE NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.993.1 Initial length of CE NPar(3)s – Octet 1
x x	x x x x x x	Initial sample length of cyclic extension (bits 12 to 7)

Table 11.60.5.1 – Standard information field – ITU-T G.993.1 initial length of CE NPar(3) coding – Octet 2

Bits								ITU-T G.993.1 initial length of CE NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Initial sample length of cyclic extension (bits 6 to 1)

Table 11.60.6.4j-4 – Standard information field – ITU-T G.993.1 RFI bands NPar(3) coding – Octet 4j – 3 (j = 1, 2, 3, 4, 5)

Bits								ITU-T G.993.1 RFI bands NPar(3)s – Octet 4j – 3 (j = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band j (bits 12 to 7)

Table 11.60.6.4j-3 – Standard information field – ITU-T G.993.1 RFI bands NPar(3) coding – Octet 4j – 2 (j = 1, 2, 3, 4, 5)

Bits								ITU-T G.993.1 RFI bands NPar(3)s – Octet 4j – 2 (j = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band j (bits 6 to 1)

Table 11.60.6.4j-2 – Standard information field – ITU-T G.993.1 RFI bands NPar(3) coding – Octet 4j – 1 (j = 1, 2, 3, 4, 5)

Bits								ITU-T G.993.1 RFI bands NPar(3)s – Octet 4j – 1 (j = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band j (bits 12 to 7)

Table 11.60.6.4j-1 – Standard information field – ITU-T G.993.1 RFI bands NPar(3) coding – Octet 4j (j = 1, 2, 3, 4, 5)

Bits								ITU-T G.993.1 RFI bands NPar(3)s – Octet 4j (j = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band j (bits 6 to 1)

9.4.31 ITU-T G.993.1 Annex I Par(2)/Par(3) parameters

Table 11.61 – Standard information field – ITU-T G.993.1 Annex I NPar(2) coding

Bits								ITU-T G.993.1 Annex I NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Upstream use of optional band (OptUp)
x	x	x	x	x	x	1	x	Downstream use of optional band (OptDn)
x	x	x	x	x	1	x	x	PSD reduction (PSDRed)
x	x	x	x	1	x	x	x	PTM
x	x	x	1	x	x	x	x	ATM
x	x	1	x	x	x	x	x	ITU-T G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.62 – Standard information field – ITU-T G.993.1 Annex I SPar(2) coding

Bits								ITU-T G.993.1 Annex I SPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	DF_STP
x	x	x	x	x	x	1	x	Reserved for use by ITU-T
x	x	x	x	x	1	x	x	Reserved for use by ITU-T
x	x	x	x	1	x	x	x	Reserved for use by ITU-T
x	x	x	1	x	x	x	x	Reserved for use by ITU-T
x	x	1	x	x	x	x	x	Reserved for use by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.62.1 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 1

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	1D symbol rate profile *s* (bits 10 to 7)

Table 11.62.1.1 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 2

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	1D symbol rate profile *s* (bits 6 to 1)

Table 11.62.1.2 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 3

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	1D centre frequency profile *k* (bits 11 to 7)

Table 11.62.1.3 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 4

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	1D centre frequency profile *k* (bits 6 to 1)

Table 11.62.1.4 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 5

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	1D constellation size M (bits 4 to 1)

Table 11.62.1.5 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 6

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	1D PSD level code (bits 8 to 7)

Table 11.62.1.6 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 7

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	1D PSD level (bits 6 to 1)

Table 11.62.1.7 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 8

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	U symbol rate profile *s* (bits 10 to 7)

Table 11.62.1.8 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 9

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	1U symbol rate profile *s* (bits 6 to 1)

Table 11.62.1.9 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 10

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	1U centre frequency profile *k* (bits 11 to 7)

Table 11.62.1.10 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 11

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	1U centre frequency profile *k* (bits 6 to 1)

Table 11.62.1.11 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 12

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	1U constellation size M (bits 4 to 1)

Table 11.62.1.12 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 13

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	1U PSD level code (bits 8 to 7)

Table 11.62.1.13 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 14

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	U PSD level (bits 6 to 1)

Table 11.62.1.14 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 15

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	x	x	STARTUP PSD_REF (bits 8 to 7)

Table 11.62.1.15 – Standard information field – ITU-T G.993.1 Annex I DF_STP NPar(3) coding – Octet 16

Bits								ITU-T G.993.1 Annex I DF_STP
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	STARTUP PSD_REF (bits 6 to 1)

9.4.32 ITU-T G.991.2 variable silence period Par(2)/Par(3) parameters

Table 11.63 – Standard information field – Variable silence period NPar(2) coding

Bits								Variable silence period NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Variable silence period length (n+1) × 10 seconds, n = 0 to 63.

9.4.33 ITU-T G.992.5 Annex C Par(2)/Par(3) parameters

Table 11.65 – Standard information field – ITU-T G.992.5 Annex C NPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex C NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	NTR
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Diagnostics mode
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Support of downstream virtual noise
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.65.1 – Standard information field – ITU-T G.992.5 Annex C NPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex C NPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Erasure decoding reporting
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 1

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Spectrum bounds upstream
x	x	x	x	x	x	1	x	Spectrum shaping upstream
x	x	x	x	x	1	x	x	Spectrum bounds downstream
x	x	x	x	1	x	x	x	Spectrum shaping downstream
x	x	x	1	x	x	x	x	Transmit signal images above the Nyquist frequency
x	x	1	x	x	x	x	x	Sub-annex
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.1 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 2

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream overhead data rate
x	x	x	x	x	x	1	x	Upstream overhead data rate
x	x	x	x	x	1	x	x	Maximum number of downstream TPS-TC functions of each type
x	x	x	x	1	x	x	x	Maximum number of upstream TPS-TC functions of each type
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Number of breakpoints for downstream virtual noise PSD (*NBPds*)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.2 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 3

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #0
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #0
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.3 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 4

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #0 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #0 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.4 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 5

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #1
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #1
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.5 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 6

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #1 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #1 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.6 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 7

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #2
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #2
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.7 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 8

Bits								ITU-T G.992.5 Annex C SPar(2)s – Octet 8
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #2 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #2 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.8 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C SPar(2)s – Octet 9
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Downstream ATM TPS-TC #3
x	x	x	x	1	x	x	x	Upstream ATM TPS-TC #3
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.0.9 – Standard information field – ITU-T G.992.5 Annex C SPar(2) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C SPar(2)s – Octet 10
x	x	x	x	x	x	x	1	Downstream PMS-TC latency path #3 supported
x	x	x	x	x	x	1	x	Upstream PMS-TC latency path #3 supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.1 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 1
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.66.1.1 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.66.1.2 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 3
x	x	0	0	0	x	x	x	MAXNOMPSDus (bits 9 to 7)

Table 11.66.1.3 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMPSDus (bits 6 to 1)

Table 11.66.1.4 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	MAXNOMATPus (bits 9 to 7)

Table 11.66.1.5 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C spectrum bounds upstream NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	MAXNOMATPus (bits 6 to 1)

Table 11.66.2 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 12 to 7)

Table 11.66.2.1 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.66.2.2 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in supported set
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.66.2.3 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.66.2.4*(j-1) – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+1
x x	x x x x x x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.66.2.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+2
x x	x x x x x x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.66.2.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+3
	x	"Last" subcarrier in supported set
x x	0 0 0 0 x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.		

Table 11.66.2.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping upstream NPar(3)s – Octet 4*(j-1)+4
x x	x x x x x x	"Last" log_tss_i (bits 6 to 1)

Table 11.66.3 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 1
x x	0 0 0 x x x	NOMPSDds (bits 9 to 7)

Table 11.66.3.1 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 2
x x	x x x x x x	NOMPSDds (bits 6 to 1)

Table 11.66.3.2 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 3
x x	0 0 0 x x x	MAXNOMPSDds (bits 9 to 7)

Table 11.66.3.3 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 4
x x	x x x x x x	MAXNOMPSDds (bits 6 to 1)

Table 11.66.3.4 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 5
x x	0 0 0 x x x	MAXNOMATPds (bits 9 to 7)

Table 11.66.3.5 – Standard information field – ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3) coding – Octet 6

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum bounds downstream NPar(3)s – Octet 6
x x	x x x x x x	MAXNOMATPds (bits 6 to 1)

Table 11.66.4 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 1
x x	x x x x x x	"First" subcarrier index i (bits 12 to 7)

Table 11.66.4.1 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 2
x x	x x x x x x	"First" subcarrier index i (bits 6 to 1)

Table 11.66.4.2 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 3
	x	"First" subcarrier in supported set
x x	0 0 0 0 x	"First" log_tss_i (bit 7)

Table 11.66.4.3 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.66.4.4*(j-1) – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 12 to 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.66.4.4*(j-1)+1 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.66.4.4*(j-1)+2 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in supported set
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)
NOTE – j is the number of subcarrier indices used to specify the spectral shape.								

Table 11.66.4.4*(j-1)+3 – Standard information field – ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits								ITU-T G.992.5 Annex C spectrum shaping downstream NPar(3)s – Octet 4*(j-1)+4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

Table 11.66.5 – Standard information field – ITU-T G.992.5 Annex C transmit signal images above the Nyquist frequency NPar(3) coding

Bits								ITU-T G.992.5 Annex C transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.66.6 – Standard information field – ITU-T G.992.5 Annex C sub-annex NPar(3) coding – Octet 1

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C sub-annex NPar(3)s – Octet 1
x x x x x x x 1	CA
x x x x x x 1 x	CB
x x x x x 1 x x	Reserved for allocation by ITU-T
x x x x 1 x x x	Reserved for allocation by ITU-T
x x x 1 x x x x	Reserved for allocation by ITU-T
x x 1 x x x x x	Reserved for allocation by ITU-T
x x 0 0 0 0 0 0	No parameters in this octet

Table 11.66.7 – Standard information field – ITU-T G.992.5 Annex C downstream overhead data rate NPar(3) coding

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream overhead data rate NPar(3)s
x x x x x x x x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.66.8 – Standard information field – ITU-T G.992.5 Annex C upstream overhead data rate NPar(3) coding

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C upstream overhead data rate NPar(3)s
x x x x x x x x	Minimum overhead data rate ((n+1) * 1 kbit/s, n = 3 to 63)

Table 11.66.9 – Standard information field – ITU-T G.992.5 Annex C maximum number of downstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C maximum number of downstream TPS-TC functions of each type NPar(3)s – Octet 1
x x x x x	Reserved for allocation by ITU-T
x x x x x	Maximum number of downstream ATM TPS-TCs (n = 0 to 4)

Table 11.66.10 – Standard information field – ITU-T G.992.5 Annex C maximum number of upstream TPS-TC functions of each type NPar(3) coding – Octet 1

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C maximum number of upstream TPS-TC functions of each type NPar(3)s – Octet 1
x x x x x	Reserved for allocation by ITU-T
x x x x x	Maximum number of upstream ATM TPS-TCs (n = 0 to 4)

Table 11.66.12 – Standard information field – ITU-T G.992.5 Annex C number of breakpoints for downstream virtual noise PSD NPar(3) coding – Octet 1

Bits 8 7 6 5 4 3 2 1	ITU-T G.992.5 Annex C number of breakpoints for downstream virtual noise PSD NPar(3)s – Octet 1
x x x x x x x x	*NBPds* (coded in bits 1 to 5)
x x x	Reserved for allocation by ITU-T

Table 11.66.15 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.15.1 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.15.2 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.15.3 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.15.4 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.15.5 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.15.6 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.15.7 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.66.15.8 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.15.9 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.15.10 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #0 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.16 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.16.1 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.16.2 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.16.3 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.16.4 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.16.5 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.16.6 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.16.7 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.66.16.8 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 9

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.16.9 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 10

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 10
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.16.10 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3) coding – Octet 11

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream ATM TPS-TC #0 NPar(3)s – Octet 11
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.19 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.19.1 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.19.2 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 3
x	x			x	x	x	x	$S_{0\,min}$ value
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.19.3 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 96 is supported
x	x	x	x	x	x	1	x	D_0 value of 128 is supported
x	x	x	x	x	1	x	x	D_0 value of 160 is supported
x	x	x	x	1	x	x	x	D_0 value of 192 is supported
x	x	x	1	x	x	x	x	D_0 value of 224 is supported
x	x	1	x	x	x	x	x	D_0 value of 256 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.19.4 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 288 is supported
x	x	x	x	x	x	1	x	D_0 value of 320 is supported
x	x	x	x	x	1	x	x	D_0 value of 352 is supported
x	x	x	x	1	x	x	x	D_0 value of 384 is supported
x	x	x	1	x	x	x	x	D_0 value of 416 is supported
x	x	1	x	x	x	x	x	D_0 value of 448 is supported
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.19.5 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #0 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	D_0 value of 480 is supported
x	x	x	x	x	x	1	x	D_0 value of 511 is supported
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	24000 bytes interleaver size
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.20 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.20.1 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 2
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.20.2 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #0 NPar(3)s – Octet 3
x x	x x x x	D_0 max value supported, D_0 = n*4+8, n=0, 2, 6, 14
x x	x x	0 – max D_0 value for D equal to power of 2-values Coding 1, 2 and 3 Reserved for allocation by ITU-T

Table 11.66.27 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 1
x x	x x x x x x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.27.1 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 2
x x	x x x x x x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.27.2 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 3
x x	x x x x x x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.27.3 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 4
x x	x x x x x x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.27.4 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits 8 7	6 5 4 3 2 1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 5
x x	x x x x x x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.27.5 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.27.6 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.27.7 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.66.27.8 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.27.9 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.27.10 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.28 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.28.1 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.28.2 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.28.3 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.28.4 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.28.5 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.28.6 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.28.7 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.66.28.8 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.28.9 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.28.10 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #1 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.31 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.31.1 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.31.2 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{1\ max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.31.3 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #1 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{1\ max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.66.32 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.32.1 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.32.2 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{1\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.32.3 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #1 NPar(3)s – Octet 4
x	x				x	x	x	$D_{1\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.66.39 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.39.1 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.39.2 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.39.3 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.39.4 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.39.5 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.39.6 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.39.7 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.66.39.8 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.39.9 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.39.10 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.40 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.40.1 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.40.2 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.40.3 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.40.4 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.40.5 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.40.6 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.40.7 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.66.40.8 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.40.9 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.40.10 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #2 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.43 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.43.1 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.43.2 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.43.3 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #2 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.66.44 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.44.1 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.44.2 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 3
x	x			x	x	x	x	$R_{2\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.44.3 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C upstream PMS-TC latency path #2 NPar(3)s – Octet 4
x	x				x	x	x	$D_{2\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.66.51 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.51.1 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.51.2 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 3
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.51.3 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits 8	7	6	5	4	3	2	1	ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 4
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.51.4 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.51.5 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.51.6 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.51.7 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					INP_no_erasure_not_required
x	x	x						IMA_flag

Table 11.66.51.8 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.51.9 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (n symbols, n = 0 to 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.51.10 – Standard information field – ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C downstream ATM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.52 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 12 to 7)

Table 11.66.52.1 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_min (minimum net data rate, bits 6 to 1)

Table 11.66.52.2 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.52.3 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.52.4 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 5

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 12 to 7)

Table 11.66.52.5 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 6

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 6
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_reserve (minimum reserved net data rate, bits 6 to 1)

Table 11.66.52.6 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 7

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 7
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Delay_max (maximum delay) (n milliseconds, n = 0 to 63)

Table 11.66.52.7 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 8

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 8
8	7	6	5	4	3	2	1	
x	x					x	x	Error_max (maximum bit error ratio)
x	x			x	x			INP_min (minimum impulse noise protection) (bits 2 and 1)
x	x		x					Reserved for allocation by ITU-T
x	x	x						IMA_flag

Table 11.66.52.8 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 9

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 9
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	INP_min (minimum impulse noise protection) (bits 8 to 3)

Table 11.66.52.9 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 10

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 10
8	7	6	5	4	3	2	1	
x	x		x	x	x	x	x	Jitter_max (maximum jitter) (coded as 31)
x	x	x						Reserved for allocation by ITU-T

Table 11.66.52.10 – Standard information field – ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3) coding – Octet 11

Bits								ITU-T G.992.5 Annex C upstream ATM TPS-TC #3 NPar(3)s – Octet 11
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	CIpolicy ZERO
x	x	x	x	x	x	1	x	CIpolicy ONE
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.66.55 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.55.1 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.55.2 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.55.3 – Standard information field – ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C downstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

Table 11.66.56 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 1

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 12 to 7)

Table 11.66.56.1 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 2

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Net_max (maximum net data rate, bits 6 to 1)

Table 11.66.56.2 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 3

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	$R_{3\,max}$ value (2 * n, n = 0 to 15)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.66.56.3 – Standard information field – ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3) coding – Octet 4

Bits								ITU-T G.992.5 Annex C upstream PMS-TC latency path #3 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x				x	x	x	$D_{3\,max}$ value (2^n, n = 0 to 7)
x	x	x	x	x				Reserved for allocation by ITU-T

9.4.34 ITU-T G.993.2 Par(2)/Par(3) parameters

Table 11.67 – Standard information field – ITU-T G.993.2 NPar(2) coding – Octet 1

Bits								ITU-T G.993.2 NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	All-digital mode
x	x	x	x	x	x	1	x	Support of downstream virtual noise
x	x	x	x	x	1	x	x	Lineprobe
x	x	x	x	1	x	x	x	Loop diagnostic mode
x	x	x	1	x	x	x	x	Support of PSD shaping in US0
x	x	1	x	x	x	x	x	Support of equalized FEXT UPBO
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.67.1 – Standard information field – ITU-T G.993.2 NPar(2) coding – Octet 2

Bits								ITU-T G.993.2 NPar(2)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.993.5-friendly ITU-T G.993.2 operation in the downstream direction
x	x	x	x	x	x	1	x	Alternative electrical length estimation method
x	x	x	x	x	1	x	x	Full ITU-T G.993.5-friendly ITU-T G.993.2 operation
x	x	x	x	1	x	x	x	Pilot sequence length multiple of 4 in full ITU-T G.993.5-friendly ITU-T G.993.2 operation
x	x	x	1	x	x	x	x	Upstream FDPS in full ITU-T G.993.5-friendly ITU-T G.993.2 operation
x	x	1	x	x	x	x	x	Support of downstream SAVN
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68 – Standard information field – ITU-T G.993.2 SPar(2) coding – Octet 1

Bits								ITU-T G.993.2 SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profiles
x	x	x	x	x	x	1	x	Bands upstream (Note)
x	x	x	x	x	1	x	x	Bands downstream (Note)
x	x	x	x	1	x	x	x	RFI bands (Note)
x	x	x	1	x	x	x	x	Initial IDFT size (2*N*)
x	x	1	x	x	x	x	x	CE lengths
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable and is a multiple of 6 octets. The length depends on the total number of bands "j" to be specified. "j" is the band index (starting from 1).

Table 11.68.0.1 – Standard information field – ITU-T G.993.2 SPar(2) coding – Octet 2

Bits								ITU-T G.993.2 SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Annex A US0
x	x	x	x	x	x	1	x	Annex B US0
x	x	x	x	x	1	x	x	Annex C US0
x	x	x	x	1	x	x	x	ITU-T G.993.5
x	x	x	1	x	x	x	x	ITU-T G.998.4 extensions
x	x	1	x	x	x	x	x	Support of VDSL2-LR
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.0.2 – Standard information field – ITU-T G.993.2 SPar(2) coding – Octet 3

Bits								ITU-T G.993.2 SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	VDSL2-LR Spectrum bounds upstream
x	x	x	x	x	x	1	x	VDSL2-LR Spectrum shaping upstream
x	x	x	x	x	1	x	x	VDSL2-LR Spectrum bounds downstream
x	x	x	x	1	x	x	x	VDSL2-LR Spectrum shaping downstream
x	x	x	1	x	x	x	x	VDSL2-LR Transmit signal images above Nyquist frequency
x	x	1	x	x	x	x	x	VDSL2-LR Offset IDFT sample #0 downstream
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.0.3 – Standard information field – ITU-T G.993.2 SPar(2) coding – Octet 4

Bits								ITU-T G.993.2 SPar(2)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	VDSL2-LR Offset IDFT sample #0 upstream
x	x	x	x	x	X	1	x	Annex N US0
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.1 – Standard information field – ITU-T G.993.2 profiles NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 profiles NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 8a
x	x	x	x	x	x	1	x	Profile 8b
x	x	x	x	x	1	x	x	Profile 8c
x	x	x	x	1	x	x	x	Profile 8d
x	x	x	1	x	x	x	x	Profile 12a
x	x	1	x	x	x	x	x	Profile 12b
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.1.1 – Standard information field – ITU-T G.993.2 profiles NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 profiles NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 17a
x	x	x	x	x	x	1	x	Profile 30a
x	x	x	x	x	1	x	x	Profile 35b
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.2.6j-6 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j – 5 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j – 5 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	End sub-carrier index of band j (bit 13)

Table 11.68.2.6j-5 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j – 4 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j – 4 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 12 to 7)

Table 11.68.2.6j-4 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j – 3 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j – 3 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 6 to 1)

Table 11.68.2.6j-3 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j – 2 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j – 2 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Start sub-carrier index of band j (bit 13)

Table 11.68.2.6j-2 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j – 1 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j – 1 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.68.2.6j-1 – Standard information field – ITU-T G.993.2 bands upstream NPar(3) coding – Octet 6j (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands upstream NPar(3)s – Octet 6j (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

Table 11.68.3.6j-6 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j – 5 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j – 5 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	End sub-carrier index of band j (bit 13)

Table 11.68.3.6j-5 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j – 4 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j – 4 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 12 to 7)

Table 11.68.3.6j-4 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j – 3 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j – 3 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 6 to 1)

Table 11.68.3.6j-3 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j – 2 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j – 2 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Start sub-carrier index of band j (bit 13)

Table 11.68.3.6j-2 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j – 1 (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j – 1 (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.68.3.6j-1 – Standard information field – ITU-T G.993.2 bands downstream NPar(3) coding – Octet 6j (j = 1, 2, 3, 4)

Bits								ITU-T G.993.2 bands downstream NPar(3)s – Octet 6j (j = 1, 2, 3, 4)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

Table 11.68.4.6j-6 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j – 5 (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j – 5 (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	End sub-carrier index of band j (bit 13)

Table 11.68.4.6j-5 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j – 4 (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j – 4 (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 12 to 7)

Table 11.68.4.6j-4 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j – 3 (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j – 3 (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 6 to 1)

Table 11.68.4.6j-3 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j – 2 (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j – 2 (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Start sub-carrier index of band j (bit 13)

Table 11.68.4.6j-2 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j – 1 (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j – 1 (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.68.4.6j-1 – Standard information field – ITU-T G.993.2 RFI bands NPar(3) coding – Octet 6j (j = 1 to 16)

Bits								ITU-T G.993.2 RFI bands NPar(3)s – Octet 6j (j = 1 to 16)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

Table 11.68.5 – Standard information field – ITU-T G.993.2 initial IDFT size NPar(3) coding

Bits								ITU-T G.993.2 initial IDFT size NPar(3)s
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	IDFT size $2N = 2^n$ (n = 6 to 13, bits 4 to 1)
x	x		1					Extended IDFT size with profile 35b
x	x	1						Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.6 – Standard information field – ITU-T G.993.2 CE length NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 CE length NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Length of CE (m = 2)
x	x	x	x	x	x	1	x	Length of CE (m = 3)
x	x	x	x	x	1	x	x	Length of CE (m = 4)
x	x	x	x	1	x	x	x	Length of CE (m = 5)
x	x	x	1	x	x	x	x	Length of CE (m = 6)
x	x	1	x	x	x	x	x	Length of CE (m = 7)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.6.1 – Standard information field – ITU-T G.993.2 CE length NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 CE length NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Length of CE (*m* = 8)
x	x	x	x	x	x	1	x	Length of CE (*m* = 9)
x	x	x	x	x	1	x	x	Length of CE (*m* = 10)
x	x	x	x	1	x	x	x	Length of CE (*m* = 11)
x	x	x	1	x	x	x	x	Length of CE (*m* = 12)
x	x	1	x	x	x	x	x	Length of CE (*m* = 13)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.6.2 – Standard information field – ITU-T G.993.2 CE length NPar(3) coding – Octet 3

Bits								ITU-T G.993.2 CE length NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Length of CE (*m* = 14)
x	x	x	x	x	x	1	x	Length of CE (*m* = 15)
x	x	x	x	x	1	x	x	Length of CE (*m* = 16)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.7 – Standard information field – ITU-T G.993.2 Annex A US0 NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 Annex A US0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-32
x	x	x	x	x	x	1	x	EU-36
x	x	x	x	x	1	x	x	EU-40
x	x	x	x	1	x	x	x	EU-44
x	x	x	1	x	x	x	x	EU-48
x	x	1	x	x	x	x	x	EU-52
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.7.1 – Standard information field – ITU-T G.993.2 Annex A US0 NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 Annex A US0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	EU-56
x	x	x	x	x	x	1	x	EU-60
x	x	x	x	x	1	x	x	EU-64
x	x	x	x	1	x	x	x	EU-128
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.7.2 – Standard information field – ITU-T G.993.2 Annex A US0 NPar(3) coding – Octet 3

Bits								ITU-T G.993.2 Annex A US0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-32
x	x	x	x	x	x	1	x	ADLU-36
x	x	x	x	x	1	x	x	ADLU-40
x	x	x	x	1	x	x	x	ADLU-44
x	x	x	1	x	x	x	x	ADLU-48
x	x	1	x	x	x	x	x	ADLU-52
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.7.3 – Standard information field – ITU-T G.993.2 Annex A US0 NPar(3) coding – Octet 4

Bits								ITU-T G.993.2 Annex A US0 NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ADLU-56
x	x	x	x	x	x	1	x	ADLU-60
x	x	x	x	x	1	x	x	ADLU-64
x	x	x	x	1	x	x	x	ADLU-128
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.7.4 – Standard information field – ITU-T G.993.2 Annex A US0 NPar(3) coding – Octet 5

Bits								ITU-T G.993.2 Annex A US0 NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	US0 supported in profile 12b
x	x	x	x	x	x	1	x	US0 supported in profile 17a
x	x	x	x	x	1	x	x	US0 supported in profile 35b
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.8 – Standard information field – ITU-T G.993.2 Annex B US0 NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 Annex B US0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	25-138 kHz (A)
x	x	x	x	x	x	1	x	25-276 kHz (M)
x	x	x	x	x	1	x	x	120-276 kHz (B)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.8.2 – Standard information field – ITU-T G.993.2 Annex B US0 NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 Annex B US0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	US0 supported in profile 12b
x	x	x	x	x	x	1	x	US0 supported in profile 17a
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.9 – Standard information field – ITU-T G.993.2 Annex C US0 NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 Annex C US0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	25-138 kHz type (b)
x	x	x	x	x	x	1	x	25-276 kHz type (b)
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.9.1 – Standard information field – ITU-T G.993.2 Annex C US0 NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 Annex C US0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	25-138 kHz type (co)
x	x	x	x	x	x	1	x	25-276 kHz type (co)
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.9.2 – Standard information field – ITU-T G.993.2 Annex C US0 NPar(3) coding – Octet 3

Bits								ITU-T G.993.2 Annex C US0 NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	US0 supported in profile 12b
x	x	x	x	x	x	1	x	US0 supported in profile 17a
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.10 – Standard information field – ITU-T G.993.2 ITU-T G.993.5 NPar(3) coding Octet 1

Bits								ITU-T G.993.2 Vectoring NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Downstream vectoring
x	x	x	x	x	x	1	x	Upstream vectoring
x	x	x	x	x	1	x	x	Pilot sequence length multiple of 4
x	x	x	x	1	x	x	x	Upstream FDPS
x	x	x	1	x	x	x	x	8192 superframes duration for O-P-VECTOR 1
x	x	1	x	x	x	x	x	Use of O-P-VECTOR 1 flag tones only
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.10.1 – Standard information field – ITU-T G.993.2 ITU-T G.993.5 NPar(3) coding Octet 2

Bits								ITU-T G.993.5 Vectoring NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Support of strong FEXT mitigation
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.11 – Standard information field – ITU-T G.993.2 ITU-T G.998.4 extensions NPar(3) coding Octet 1

Bits								ITU-T G.993.2 ITU-T G.998.4 extensions NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	ITU-T G.998.4 Annex D support
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.12 – Standard information field – Support of VDSL2-LR NPar(3) coding

Bits								Support of VDSL2-LR NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Short loop operation type
x	x	x	x	x	x	1	x	Medium loop operation type
x	x	x	x	x	1	x	x	Long loop operation type
x	x	x	x	1	x	x	x	FMT-O-P-TREF2
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.13 – Standard information field – VDSL2-LR spectrum bounds upstream NPar(3) coding – Octet 1

Bits								VDSL2-LR spectrum bounds upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDus (bits 9 to 7)

Table 11.68.13.1 – Standard information field – VDSL2-LR spectrum bounds upstream NPar(3) coding – Octet 2

Bits								VDSL2-LR spectrum bounds upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDus (bits 6 to 1)

Table 11.68.14 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 1

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	"First" subcarrier index i (bits 9 to 7)

Table 11.68.14.1 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 2

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.68.14.2 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 3

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in the SUPPORTEDCARRIERSset
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.68.14.3 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 4

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.68.14.4*(j-1) – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+1

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	"Last" subcarrier index i (bits 9 to 7)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4× (k-1)+1 with k=2..j-1 shall contain the description for the 2^{nd} to $(j-1)^{th}$ subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 1

Table 11.68.14.4*(j-1)+1 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+2

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" subcarrier index i (bits 6 to 1)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4×(k-1)+2 with k=2..j-1 shall contain the description for the 2^{nd} to $(j-1)^{th}$ subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 2

Table 11.68.14.4*(j-1)+2 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+3

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in the SUPPORTEDCARRIERSset
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4×(k-1)+3 with k=2..j-1 shall contain the description for the 2^{nd} to $(j-1)^{th}$ subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 3

Table 11.68.14.4*(j-1)+3 – Standard information field – VDSL2-LR spectrum shaping upstream NPar(3) coding – Octet 4*(j-1)+4

Bits								VDSL2-LR spectrum shaping upstream NPar(3)s – Octet 4*(j – 1) + 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"Last" log_tss_i (bits 6 to 1)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.
NOTE 2 – Octets 4×(k-1)+4 with k=2..j-1 shall contain the description for the 2nd to (j-1)th subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 4

Table 11.68.15 – Standard information field – VDSL2-LR spectrum bounds downstream NPar(3) coding – Octet 1

Bits								VDSL2-LR spectrum bounds downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	NOMPSDds (bits 9 to 7)

Table 11.68.15.1 – Standard information field – VDSL2-LR spectrum bounds downstream NPar(3) coding – Octet 2

Bits								VDSL2-LR spectrum bounds downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	NOMPSDds (bits 6 to 1)

Table 11.68.16 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 1

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	"First" subcarrier index i (bits 9 to 7)

Table 11.68.16.1 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 2

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" subcarrier index i (bits 6 to 1)

Table 11.68.16.2 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 3

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
		x						"First" subcarrier in the SUPPORTEDCARRIERSset
x	x		0	0	0	0	x	"First" log_tss_i (bit 7)

Table 11.68.16.3 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 4

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	"First" log_tss_i (bits 6 to 1)

Table 11.68.16.4*(j-1) – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+1

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	"Last" subcarrier index i (bits 9 to 7)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4×(k-1)+1 with k=2..j-1 shall contain the description for the 2nd to (j-1)th subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 1

Table 11.68.16.4*(j-1)+1 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+2

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 2
8	7	6	5	4	3	2	1	
x	x	x	x	X	x	x	x	"Last" subcarrier index i (bits 6 to 1)

NOTE – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4×(k-1)+2 with k=2..j-1 shall contain the description for the 2nd to (j-1)th subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 2

Table 11.68.16.4*(j-1)+2 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+3

Bits								VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 3
8	7	6	5	4	3	2	1	
		x						"Last" subcarrier in the SUPPORTEDCARRIERSset
x	x		0	0	0	0	x	"Last" log_tss_i (bit 7)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.

NOTE 2 – Octets 4×(k-1)+3 with k=2..j-1 shall contain the description for the 2nd to (j-1)th subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 3

Table 11.68.16.4*(j-1)+3 – Standard information field – VDSL2-LR spectrum shaping downstream NPar(3) coding – Octet 4*(j-1)+4

Bits							VDSL2-LR spectrum shaping downstream NPar(3)s – Octet 4*(j – 1) + 4
8	7	6	5	4	3	2	1	
x	x	x	x	X	x	x	x	"Last" log_tss_i (bits 6 to 1)

NOTE 1 – j is the number of subcarrier indices used to specify the spectral shape.
NOTE 2 – Octets 4×(k-1)+4 with k=2..j-1 shall contain the description for the 2nd to (j-1)th subcarriers used to specify the spectral shape. These octets shall have the same coding as defined for octet 4× (j – 1) + 4

Table 11.68.17 – Standard information field – VDSL2-LR transmit signal images above the Nyquist frequency NPar(3) coding

Bits							VDSL2-LR transmit signal images above the Nyquist frequency NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x			IDFT size N
x	x					x	x	IFFT fill

Table 11.68.18 – Standard information field – VDSL2-LR Offset IDFT sample #0 downstream NPar(3) coding – Octet 1

Bits							VDSL2-LR Offset IDFT sample #0 downstream NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Offset IDFT sample #0 (bits 6 to 1)

Table 11.68.18.1 – Standard information field – VDSL2-LR Offset IDFT sample #0 downstream NPar(3) coding – Octet 2

Bits							VDSL2-LR Offset IDFT sample #0 downstream NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	0	0	0	0	0	x	Offset IDFT sample #0 (bit 7)

Table 11.68.19 – Standard information field – VDSL2-LR Offset IDFT sample #0 upstream NPar(3) coding

Bits							VDSL2-LR Offset IDFT sample #0 upstream NPar(3)s
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Offset IDFT sample #0 (bits 3 to 1)

Table 11.68.20 – Standard information field – ITU-T G.993.2 Annex N US0 NPar(3) coding – Octet 1

Bits								ITU-T G.993.2 Annex N US0 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	25-138 kHz (A)
x	x	x	x	x	x	1	x	25-276 kHz (M)
x	x	x	x	x	1	x	x	120-276 kHz (B)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.68.20.1 – Standard information field – ITU-T G.993.2 Annex N US0 NPar(3) coding – Octet 2

Bits								ITU-T G.993.2 Annex N US0 NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	US0 supported in profile 17a
x	x	x	x	x	x	1	x	US0 supported in profile 35b
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

9.4.35 ITU-T G.9701 Par(2)/Par(3) parameters

Table 11.69 – Standard information field – ITU-T G.9701 NPar(2) coding – Octet 1

Bits								ITU-T G.9701 NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Annex X operation (Operation in a crosstalk-free environment)
x	x	x	x	x	x	1	x	Annex D operation (Operation with Dynamic Time Assignment in a crosstalk environment).
x	x	x	x	x	1	x	x	Support of special probe sequence
x	x	x	x	1	x	x	x	Default CE length
x	x	x	1	x	x	x	x	Default number of symbol periods in TDD frame.
x	x	1	x	x	x	x	x	Extended probe sequence length
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.69.1 – Standard information field – ITU-T G.9701 NPar(2) coding – Octet 2

Bits								ITU-T G.9701 NPar(2)s – Octet 2
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Support of extended range of Tg1'
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70 – Standard information field – ITU-T G.9701 SPar(2) coding – Octet 1

Bits								ITU-T G.9701 SPar(2)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Profiles
x	x	x	x	x	x	1	x	Downstream Transmission band
x	x	x	x	x	1	x	x	Number of downstream symbol positions in TDD frame
x	x	x	x	1	x	x	x	RFI bands (Note)
x	x	x	1	x	x	x	x	Duration of Channel Discovery 1-1
x	x	1	x	x	x	x	x	CE lengths
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable and is a multiple of 4 octets (see Table 11.70.4). The length depends on the total number of bands "j" to be specified. "j" is the band index (starting from 1).

Table 11.70.0.1 – Standard information field – ITU-T G.9701 SPar(2) coding – Octet 2

Bits								ITU-T G.9701 SPar(2)s – Octet 2
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Number of symbol periods in TDD frame
x	x	x	x	x	x	1	x	International amateur radio bands
x	x	x	x	x	1	x	x	Scrambler seed
x	x	x	x	1	x	x	x	Special probe sequence (Note 1)
x	x	x	1	x	x	x	x	IDS (Note 2)
x	x	1	x	x	x	x	x	Number of SOC symbol repetitions (R_s)
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – The length of the corresponding NPar(3) field is variable (see Table 11.70.10). The length is 3 octets if the number of elements of the special probe sequence (N) is smaller or equal to 3; the length is 4 octets if N≤8; the length is $4 + \left\lceil \frac{N-8}{6} \right\rceil$ octets if N>8.

NOTE 2 – The length of the corresponding NPar(3) field is variable (see Table 11.70.11). The length is $\left\lceil \frac{L}{6} \right\rceil$ where L is the length of the IDS.

Table 11.70.0.2 – Standard information field – ITU-T G.9701 SPar(2) coding – Octet 3

Bits								ITU-T G.9701 SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Number of DS initialization data symbols (s_{ds})
x	x	x	x	x	x	1	x	Downstream RMC offset
x	x	x	x	x	1	x	x	CD timeout
x	x	x	x	1	x	x	x	Minimum number of symbols between Downstream RMC to Upstream RMC (min_DRMCds2us)
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.1 – Standard information field – ITU-T G.9701 profiles NPar(3) coding – Octet 1

Bits								ITU-T G.9701 profiles NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile 106a
x	x	x	x	x	x	1	x	Profile 212a
x	x	x	x	x	1	x	x	Profile 106b
x	x	x	x	1	x	x	x	Profile 106c
x	x	x	1	x	x	x	x	Profile 212c
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.2.0 – Standard information field – ITU-T G.9701 downstream transmission band NPar(3) coding – Octet 1

Bits								ITU-T G.9701 transmission band NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Stop sub-carrier index (bits 12 to 7)

Table 11.70.2.1 – Standard information field – ITU-T G.9701 downstream transmission band NPar(3) coding – Octet 2

Bits								ITU-T G.9701 transmission band NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Stop sub-carrier index (bits 6 to 1)

Table 11.70.2.2 – Standard information field – ITU-T G.9701 downstream transmission band NPar(3) coding – Octet 3

Bits								ITU-T G.9701 transmission band NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index (bits 12 to 7)

Table 11.70.2.3 – Standard information field – ITU-T G.9701 downstream transmission band NPar(3) coding – Octet 4

Bits								ITU-T G.9701 transmission band NPar(3)s
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Start sub-carrier index (bits 6 to 1)

Table 11.70.3 – Standard information field – ITU-T G.9701 Number of downstream symbol positions in TDD frame NPar(3) coding – Octet 1

Bits								ITU-T G.9701 Number of downstream symbol positions in TDD frame NPar(3)s
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	M_{ds} value

Table 11.70.4.4j-4 – Standard information field – ITU-T G.9701 RFI bands NPar(3) coding – Octet 4j – 3 (j = 1 to 32)

Bits								ITU-T G.9701 RFI bands NPar(3)s – Octet 4j – 3 (j = 1 to 32)
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 12 to 7)

Table 11.70.4.4j-3 – Standard information field – ITU-T G.9701 RFI bands NPar(3) coding – Octet 4j – 2 (j = 1 to 32)

Bits								ITU-T G.9701 RFI bands NPar(3)s – Octet 4j – 2 (j = 1 to 32)
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 6 to 1)

Table 11.70.4.4j-2 – Standard information field – ITU-T G.9701 RFI bands NPar(3) coding – Octet 4j – 1 (j = 1 to 32)

Bits								ITU-T G.9701 RFI bands NPar(3)s – Octet 4j – 1 (j = 1 to 32)
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.70.4.4j-1 – Standard information field – ITU-T G.9701 RFI bands NPar(3) coding – Octet 4j (j = 1 to 32)

Bits								ITU-T G.9701 RFI bands NPar(3)s – Octet 4j (j = 1 to 32)
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

Table 11.70.5 – Standard information field – ITU-T G.9701
Duration of Channel Discovery 1-1 NPar(3) coding – Octet 1

Bits								ITU-T G.9701 duration of Channel Discovery 1-1 NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	0	x	x	x	x	Duration of Channel Discovery 1-1 coded as (i+1) × 8192 symbols

Table 11.70.6 – Standard information field – ITU-T G.9701
CE length NPar(3) coding – Octet 1

Bits								ITU-T G.9701 CE length NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Length of CE (m = 4)
x	x	x	x	x	x	1	x	Length of CE (m = 8)
x	x	x	x	x	1	x	x	Length of CE (m = 12)
x	x	x	x	1	x	x	x	Length of CE (m = 14)
x	x	x	1	x	x	x	x	Length of CE (m = 16)
x	x	1	x	x	x	x	x	Length of CE (m = 20)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.6.1 – Standard information field – ITU-T G.9701
CE length NPar(3) coding – Octet 2

Bits								ITU-T G.9701 CE length NPar(3)s – Octet 2
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	Length of CE (m = 24)
x	x	x	x	x	x	1	x	Length of CE (m = 30)
x	x	x	x	x	1	x	x	Length of CE (m = 33)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.7 – Standard information field – ITU-T G.9701
Number of symbol periods in TDD frame NPar(3) coding – Octet 1

Bits								ITU-T G.9701 number of symbol periods in TDD frame NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	1	M_F = 23
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.8 – Standard information field – ITU-T G.9701 International amateur radio bands NPar(3) coding – Octet 1

Bits								ITU-T G.9701 International amateur radio bands NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	International amateur radio band 1800-2000 kHz
x	x	x	x	x	x	1	x	International amateur radio band 3500-4000 kHz
x	x	x	x	x	1	x	x	International amateur radio band 7000-7300 kHz
x	x	x	x	1	x	x	x	International amateur radio band 10100-10150 kHz
x	x	x	1	x	x	x	x	International amateur radio band 14000-14350 kHz
x	x	1	x	x	x	x	x	International amateur radio band 18068-18168 kHz
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.8.1 – Standard information field – ITU-T G.9701 International amateur radio bands NPar(3) coding – Octet 2

Bits								ITU-T G.9701 International amateur radio bands NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	International amateur radio band 21000-21450 kHz
x	x	x	x	x	x	1	x	International amateur radio band 24890-24990 kHz
x	x	x	x	x	1	x	x	International amateur radio band 28000-29700 kHz
x	x	x	x	1	x	x	x	International amateur radio band 50000-54000 kHz
x	x	x	1	x	x	x	x	International amateur radio band 69900-70500 kHz
x	x	1	x	x	x	x	x	International amateur radio band 144000-148000 kHz
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.8.2 – Standard information field – ITU-T G.9701 International amateur radio bands NPar(3) coding – Octet 3

Bits								ITU-T G.9701 International amateur radio bands NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	International amateur radio band 5351.5-5366.5 kHz
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.70.9 – Standard information field – ITU-T G.9701 scrambler seed NPar(3) coding – Octet 1

Bits								ITU-T G.9701 scrambler seed NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	x	x	x	x	x	Scrambler seed (bits d_{11} to d_7)

Table 11.70.9.1 – Standard information field – ITU-T G.9701 scrambler seed NPar(3) coding – Octet 2

Bits								ITU-T G.9701 scrambler seed NPar(3)s – Octet 2
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Scrambler seed (bits d_6 to d_1)

Table 11.70.10 – Standard information field – ITU-T G.9701 Special probe sequence NPar(3) coding – Octet 1

Bits								ITU-T G.9701 Special probe sequence NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	0	0	0	x	x	Length of the probe sequence (bits 8 to 7)

Table 11.70.10.1 – Standard information field – ITU-T G.9701 Special probe sequence NPar(3) coding – Octet 2

Bits								ITU-T G.9701 Special probe sequence NPar(3)s – Octet 2
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Length of the probe sequence (bits 6 to 1)

Table 11.70.10.2 – Standard information field – ITU-T G.9701 Special probe sequence NPar(3) coding – Octet 3

Bits								ITU-T G.9701 Special probe sequence NPar(3)s – Octet 3
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Probe sequence elements (with index 2 to 0)

Table 11.70.10.3 – Standard information field – ITU-T G.9701 Special probe sequence NPar(3) coding – Octet 4

Bits								ITU-T G.9701 Special probe sequence NPar(3)s – Octet 4
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Probe sequence elements (with index 7 to 3)

Table 11.70.10.(3+j) – Standard information field – ITU-T G.9701
Special probe sequence NPar(3) coding – Octet 4 + j (j=1 to 20)

Bits								ITU-T G.9701 Special probe sequence NPar(3)s – Octet 4
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Probe sequence elements (with index (6j+7) to (6j+2))

Table 11.70.11 – Standard information field – ITU-T G.9701
IDS NPar(3) coding – Octet 1

Bits								ITU-T G.9701 IDS NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	Length of the IDS (bits 6 to 1)

Table 11.70.11.j – Standard information field – ITU-T G.9701
IDS NPar(3) coding – Octet 1 + j (with j=1 to 6)

Bits								ITU-T G.9701 IDS NPar(3)s – Octet 1+j
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	x	x	x	x	x	x	IDS (bits (6j) to (6j-5))

Table 11.70.12 – Standard information field – ITU-T G.9701
Number of SOC symbol repetitions NPar(3) coding – Octet 1

Bits								ITU-T G.9701 number of SOC repetitions NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	x	x	x	x	x	Number of SOC symbol repetitions (R_{ds}) (bits 5 to 1)

Table 11.70.13 – Standard information field – ITU-T G.9701
Number DS initialization data symbols NPar(3) coding – Octet 1

Bits								ITU-T G.9701 number DS data symbols during initialization NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	x	x	x	x	x	Number of data symbols (s_{ds}) during initialization 1 (bits 5 to 1, coded as s_{ds}-1)

Table 11.70.14 – Standard information field – ITU-T G.9701
Downstream RMC offset NPar(3) coding – Octet 1

Bits								ITU-T G.9701 Downstream RMC offset NPar(3)s – Octet 1
8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	
x	x	0	x	x	x	x	x	Number of offset symbols ($D_{RMC,ds}$) (bits 5 to 1 coded as $D_{RMC,ds}$-1)

Table 11.70.15 – Standard information field – [ITU-T G.9701]
CD timeout NPar(3) coding – Octet 1

Bits								ITU-T G.9701 CD timeout NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	CD timeout 1 (bits 3 to 1)
x	x	x	x	x	x	x	x	CD timeout 2 (bits 6 to 4)

Table 11.70.16 – Standard information field – ITU-T G.9701
min_DRMCds2us NPar(3) coding – Octet 1

Bits								ITU-T G.9701 min_DRMCds2us NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	0	x	x	x	Minimum number of symbols between Downstream RMC to Upstream RMC (min_DRMCds2us) (bits 3 to 1). Valid values are 4 and 5.

9.4.36 ITU-T G.9711 Par(2)/Par(3) parameters

Table 11.71 – Standard information field – ITU-T G.9711 NPar(2) coding – Octet 1

Bits								ITU-T G.9711 NPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Reserved for allocation by ITU-T
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Default CE length
x	x	x	1	x	x	x	x	Default number of symbol periods in PDX frame.
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72 – Standard information field – ITU-T G.9711 SPar(2) coding – Octet 1

Bits								ITU-T G.9711 SPar(2)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profiles
x	x	x	x	x	x	1	x	Downstream Transmission band
x	x	x	x	x	1	x	x	Number of symbol positions in downstream PSF
x	x	x	x	1	x	x	x	RFI bands (Note)
x	x	x	1	x	x	x	x	Duration of Channel Discovery 1-1
x	x	1	x	x	x	x	x	CE lengths
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable and is a multiple of 5 octets (see Table 11.72.4). The length depends on the total number of bands "j" to be specified. "j" is the band index (starting from 1).

Table 11.72.0.1 – Standard information field – ITU-T G.9711 SPar(2) coding – Octet 2

Bits								ITU-T G.9711 SPar(2)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Number of symbol periods in PDX frame
x	x	x	x	x	x	1	x	International amateur radio bands (IARBANDS)
x	x	x	x	x	1	x	x	Scrambler seed
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	IDS (Note)
x	x	1	x	x	x	x	x	Number of SOC symbol repetitions (R_s)
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable (see Table 11.72.11). The length is $\left\lceil \frac{L}{6} \right\rceil$ where L is the length of the IDS.

Table 11.72.0.2 – Standard information field – ITU-T G.9711 SPar(2) coding – Octet 3

Bits								ITU-T G.9711 SPar(2)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Number of initialization data symbols in downstream PSF (s_{ds})
x	x	x	x	x	x	1	x	Downstream RMC offset
x	x	x	x	x	1	x	x	CD timeout
x	x	x	x	1	x	x	x	DTFO downstream Band 1
x	x	x	1	x	x	x	x	MTU-R downstream operation bands (Note)
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE – The length of the corresponding NPar(3) field is variable and is a multiple of 5 octets (see Table 11.72.17). The length depends on the total number of bands "j" to be specified. "j" is the band index (starting from 1).

Table 11.72.1.0 – Standard information field – ITU-T G.9711 profiles NPar(3) coding – Octet 1

Bits								ITU-T G.9711 profiles NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile P424a
x	x	x	x	x	x	1	x	Profile P424amp
x	x	x	x	x	1	x	x	Profile P424d
x	x	x	x	1	x	x	x	Profile P424dmp
x	x	x	1	x	x	x	x	Profile Q424c
x	x	1	x	x	x	x	x	Profile Q424cmp
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.1.1 – Standard information field – ITU-T G.9711 profiles NPar(3) coding – Octet 2

Bits								ITU-T G.9711 profiles NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Profile Q424d
x	x	x	x	x	x	1	x	Profile Q424dmp
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.2.0 – Standard information field – ITU-T G.9711 downstream transmission band NPar(3) coding – Octet 1

Bits								ITU-T G.9711 transmission band NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	Stop sub-carrier index (bits 13 to 10)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.72.2.1 – Standard information field – ITU-T G.9711 downstream transmission band NPar(3) coding – Octet 2

Bits								ITU-T G.9711 transmission band NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Stop sub-carrier index (bits 9 to 4)

Table 11.72.2.2 – Standard information field – ITU-T G.9711 downstream transmission band NPar(3) coding – Octet 3

Bits								ITU-T G.9711 transmission band NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x						x	Start sub-carrier index (bit 13)
x	x	x	x	x				Stop sub-carrier index (bits 3 to 1)
					x	x		Reserved for allocation by ITU-T

Table 11.72.2.3 – Standard information field – ITU-T G.9711 downstream transmission band NPar(3) coding – Octet 4

Bits								ITU-T G.9711 transmission band NPar(3)s – Octet 4
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	X	Start sub-carrier index (bits 12 to 7)

Table 11.72.2.4 – Standard information field – ITU-T G.9711 downstream transmission band NPar(3) coding – Octet 5

Bits								ITU-T G.9711 transmission band NPar(3)s – Octet 5
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index (bits 6 to 1)

Table 11.72.3 – Standard information field – ITU-T G.9711 Number of symbol positions in downstream PSF NPar(3) coding – Octet 1

Bits								ITU-T G.9711 Number of symbol positions in downstream PSF NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	M_{ds} value

Table 11.72.4.5j-4 – Standard information field – ITU-T G.9711 RFI bands NPar(3) coding – Octet 5j – 4 (j = 1 to 32)

Bits								ITU-T G.9711 RFI bands NPar(3)s – Octet 5j – 4 (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	End sub-carrier index of band j (bits 13 to 10)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.72.4.5j-3 – Standard information field – ITU-T G.9711 RFI bands NPar(3) coding – Octet 5j – 3 (j = 1 to 32)

Bits								ITU-T G.9711 RFI bands NPar(3)s – Octet 5j – 3 (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 9 to 4)

Table 11.72.4.5j-2 – Standard information field – ITU-T G.9711 RFI bands NPar(3) coding – Octet 5j – 2 (j = 1 to 32)

Bits								ITU-T G.9711 RFI bands NPar(3)s – Octet 5j – 2 (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x						x	Start sub-carrier index of band j (bit 13)
x	x	x	x	x				End sub-carrier index of band j (bit 3 to 1)
x	x				x	x		Reserved for allocation by ITU-T

Table 11.72.4.5j-2 – Standard information field – ITU-T G.9711 RFI bands NPar(3) coding – Octet 5j – 1 (j = 1 to 32)

Bits								ITU-T G.9711 RFI bands NPar(3)s – Octet 5j – 1 (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.72.4.5j-1 – Standard information field – ITU-T G.9711 RFI bands NPar(3) coding – Octet 5j (j = 1 to 32)

Bits								ITU-T G.9711 RFI bands NPar(3)s – Octet 5j (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

Table 11.72.5 – Standard information field – ITU-T G.9711 Duration of Channel Discovery 1-1 NPar(3) coding – Octet 1

Bits								ITU-T G.9711 duration of Channel Discovery 1-1 NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	Duration of Channel Discovery 1-1 coded as (i+1) × 8192 symbols

Table 11.72.6 – Standard information field – ITU-T G.9711 CE length NPar(3) coding – Octet 1

Bits								ITU-T G.9711 CE length NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Length of CE (*m* = 4)
x	x	x	x	x	x	1	x	Length of CE (*m* = 8)
x	x	x	x	x	1	x	x	Length of CE (*m* = 12)
x	x	x	x	1	x	x	x	Length of CE (*m* = 14)
x	x	x	1	x	x	x	x	Length of CE (*m* = 16)
x	x	1	x	x	x	x	x	Length of CE (*m* = 20)
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.6.1 – Standard information field – ITU-T G.9711 CE length NPar(3) coding – Octet 2

Bits								ITU-T G.9711 CE length NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	Length of CE (*m* = 24)
x	x	x	x	x	x	1	x	Length of CE (*m* = 30)
x	x	x	x	x	1	x	x	Length of CE (*m* = 33)
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.7 – Standard information field – ITU-T G.9711
Number of symbol periods in PDX frame NPar(3) coding – Octet 1

Bits								ITU-T G.9711 number of symbol periods in PDX frame NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	M_F = 23
x	x	x	x	x	x	1	x	Reserved for allocation by ITU-T
x	x	x	x	x	1	x	x	Reserved for allocation by ITU-T
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.8 – Standard information field – ITU-T G.9711
International amateur radio bands NPar(3) coding – Octet 1

Bits								ITU-T G.9711 International amateur radio bands NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	International amateur radio band 1800-2000 kHz
x	x	x	x	x	x	1	x	International amateur radio band 3500-4000 kHz
x	x	x	x	x	1	x	x	International amateur radio band 7000-7300 kHz
x	x	x	x	1	x	x	x	International amateur radio band 10100-10150 kHz
x	x	x	1	x	x	x	x	International amateur radio band 14000-14350 kHz
x	x	1	x	x	x	x	x	International amateur radio band 18068-18168 kHz
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.8.1 – Standard information field – ITU-T G.9711
International amateur radio bands NPar(3) coding – Octet 2

Bits								ITU-T G.9711 International amateur radio bands NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	International amateur radio band 21000-21450 kHz
x	x	x	x	x	x	1	x	International amateur radio band 24890-24990 kHz
x	x	x	x	x	1	x	x	International amateur radio band 28000-29700 kHz
x	x	x	x	1	x	x	x	International amateur radio band 50000-54000 kHz
x	x	x	1	x	x	x	x	International amateur radio band 69900-70500 kHz
x	x	1	x	x	x	x	x	International amateur radio band 144000-148000 kHz
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.8.2 – Standard information field – ITU-T G.9711 International amateur radio bands NPar(3) coding – Octet 3

Bits 8	7	6	5	4	3	2	1	ITU-T G.9711 International amateur radio bands NPar(3)s – Octet 3
x	x	x	x	x	x	x	1	International amateur radio band 5351.5-5366.5 kHz
x	x	x	x	x	x	1	x	International amateur radio band 219000-225000 kHz
x	x	x	x	x	1	x	x	International amateur radio band 420000-450000 kHz
x	x	x	x	1	x	x	x	Reserved for allocation by ITU-T
x	x	x	1	x	x	x	x	Reserved for allocation by ITU-T
x	x	1	x	x	x	x	x	Reserved for allocation by ITU-T
x	x	0	0	0	0	0	0	No parameters in this octet

Table 11.72.9 – Standard information field – ITU-T G.9711 scrambler seed NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.9711 scrambler seed NPar(3)s – Octet 1
x	x	0	x	x	x	x	x	Scrambler seed (bits d_{11} to d_7)

Table 11.72.9.1 – Standard information field – ITU-T G.9711 scrambler seed NPar(3) coding – Octet 2

Bits 8	7	6	5	4	3	2	1	ITU-T G.9711 scrambler seed NPar(3)s – Octet 2
x	x	x	x	x	x	x	x	Scrambler seed (bits d_6 to d_1)

Table 11.72.11 – Standard information field – ITU-T G.9711 IDS NPar(3) coding – Octet 1

Bits 8	7	6	5	4	3	2	1	ITU-T G.9711 IDS NPar(3)s – Octet 1
x	x	x	x	x	x	x	x	Length of the IDS (bits 6 to 1)

Table 11.72.11.j – Standard information field – ITU-T G.9711 IDS NPar(3) coding – Octet 1 + j (with j=1 to 6)

Bits 8	7	6	5	4	3	2	1	ITU-T G.9711 IDS NPar(3)s – Octet 1+j
x	x	x	x	x	x	x	x	IDS (bits (6j) to (6j-5))

Table 11.72.12 – Standard information field – ITU-T G.9711
Number of SOC symbol repetitions NPar(3) coding – Octet 1

Bits								ITU-T G.9711 number of SOC repetitions NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	Number of SOC symbol repetitions (R_{ds}) (bits 5 to 1)

Table 11.72.13 – Standard information field – ITU-T G.9711
Number of initialization data symbols in downstream PSF NPar(3) coding – Octet 1

Bits								ITU-T G.9711 number data symbols during initialization NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	Number of initialization data symbols in downstream PSF (s_{ds}) (bits 5 to 1, coded as s_{ds}-1)

Table 11.72.14 – Standard information field – ITU-T G.9711
Downstream RMC offset NPar(3) coding – Octet 1

Bits								ITU-T G.9711 Downstream RMC offset NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	x	x	x	x	x	Number of offset symbols ($D_{RMC,ds}$) (bits 5 to 1 coded as $D_{RMC,ds}$-1)

Table 11.72.15 – Standard information field – [ITU-T G.9711]
CD timeout NPar(3) coding – Octet 1

Bits								ITU-T G.9711 CD timeout NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x				x	x	x	CD timeout 1
x	x	x	x	x				CD timeout 2

Table 11.72.16.1 – Standard information field – [ITU-T G.9711]
DTFO downstream band 1 start sub-carrier NPar(3) coding – Octet 1

Bits								ITU-T G.9711 DTFO downstream band 1 start sub-carrier NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x						x	DTFO downstream band 1 start sub-carrier(bit 13)
x	x	x	x	x	x	x		Reserved for allocation by ITU-T

Table 11.72.16.2 – Standard information field – [ITU-T G.9711]
DTFO downstream band 1 start sub-carrier NPar(3) coding – Octet 2

Bits								ITU-T G.9711 DTFO downstream band 1 start sub-carrier NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DTFO downstream band 1 start sub-carrier (bit 12-7)

Table 11.72.16.3 – Standard information field – [ITU-T G.9711]
DTFO downstream band 1 start sub-carrier NPar(3) coding – Octet 3

Bits								ITU-T G.9711 DTFO downstream band 1 start sub-carrier NPar(3)s – Octet 3
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DTFO downstream band 1 start sub-carrier (bit 6-1)

Table 11.72.17.5j-4 – Standard information field – ITU-T G.9711
MTU-R downstream operation bands NPar(3) coding – Octet 5j – 4 (j = 1 to 2)

Bits								ITU-T G.9711 MTU-R downstream operation bands NPar(3)s – Octet 5j – 4 (j = 1 to 2)
8	7	6	5	4	3	2	1	
x	x			x	x	x	x	End sub-carrier index of band j (bits 13 to 10)
x	x	x	x					Reserved for allocation by ITU-T

Table 11.72.17.5j-3 – Standard information field – ITU-T G.9711
MTU-R downstream operation bands NPar(3) coding – Octet 5j – 3 (j = 1 to 2)

Bits								ITU-T G.9711 MTU-R downstream operation bands NPar(3)s – Octet 5j – 3 (j = 1 to 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End sub-carrier index of band j (bits 9 to 4)

Table 11.72.17.5j-2 – Standard information field – ITU-T G.9711
MTU-R downstream operation bands NPar(3) coding – Octet 5j – 2 (j = 1 to 2)

Bits								ITU-T G.9711 MTU-R downstream operation bands NPar(3)s – Octet 5j – 2 (j = 1 to 32)
8	7	6	5	4	3	2	1	
x	x						x	Start sub-carrier index of band j (bit 13)
x	x	x	x	x				End sub-carrier index of band j (bit 3 to 1)
x	x				x	x		Reserved for allocation by ITU-T

Table 11.72.17.5j-2 – Standard information field – ITU-T G.9711
MTU-R downstream operation bands NPar(3) coding – Octet 5j – 1 (j = 1 to 2)

Bits								ITU-T G.9711 MTU-R downstream operation bands NPar(3)s – Octet 5j – 1 (j = 1 to 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 12 to 7)

Table 11.72.17.5j-1 – Standard information field – ITU-T G.9711
MTU-R downstream operation bands bands NPar(3) coding – Octet 5j (j = 1 to 2)

Bits								ITU-T G.9711 MTU-R downstream operation bands NPar(3)s – Octet 5j (j = 1 to 2)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start sub-carrier index of band j (bits 6 to 1)

9.5 Non-standard information field (NS)

MP, MS, CL and CLR messages may optionally contain a non-standard information field to convey information beyond that defined in this Recommendation. For MR, ACK, NAK and REQ messages,

the non-standard information field is not used and is therefore of zero length. When non-standard information is to be sent, the "non-standard field" parameter shall be set to binary ONE in the identification field of the transmitted message (see Table 8).

The non-standard information field may be composed of one or more non-standard information blocks. The format of the non-standard information field is shown in Figure 10. The first octet of the non-standard information field shall indicate the number of non-standard information blocks to follow.

Number of non-standard information blocks = N (1 octet)
Non-standard information block 1
Non-standard information block 2
. . .
Non-standard information block N

Figure 10 – Non-standard information field (NS) format

Each non-standard information block (see Figure 11) is composed of:

- a length indicator (one octet) specifying the length of the remainder of the block;
- a country code (2 octets), as defined in [ITU-T T.35];
- a 4-octet provider code as specified by the country identified in [ITU-T T.35]; and
- non-standard information (M octets).

8	7	6	5	4	3	2	1
Non-standard information length = M + 6 (1 octet)							
T.35 country code (2 octets – see Note 1)							
Provider code (vendor identification) (4 octets – see Note 2)							
Vendor-specific information (M octets)							

NOTE 1 – If the bits in the first octet are not all set to binary ONE, the bits in the second octet shall be set to binary ZERO by the transmitter and ignored by the receiver.
NOTE 2 – Specification of the coding and order of transmission of this field is the responsibility of the regional standards body allocating the provider code. See Appendix II for provider code contact information.

Figure 11 – Non-standard information block format

9.6 Overall message composition

Table 12 shows which fields are permitted in each message type. An "X" indicates that the field shall be included whilst a "–" indicates that the field shall not be included.

Once a transaction C (see clause 10.1) has been completed, any subsequent MS message within the same ITU-T G.994.1 session shall only contain those octets of the identification (I) and standard information (S) fields, and those blocks of non-standard information (NS) that were contained in both the CLR and CL messages of the previous transaction C.

Table 12 – Overall message composition

Messages	Identification				Standard information	Non-standard information
	Message type and version (2 octets)	Additional information		Service and channel parameters (Note 1)	Modulations and protocols available (Note 2)	(Note 3) $\left\lceil 1+\sum_{i=1}^{N}(7+M_i) \right\rceil$ octets
		Vendor ID (8 octets)	Retransmission (Note 4)			
MR	X	–	–	–	–	–
CLR	X	X	–	X	X	as necessary
CL	X	X	–	X	X	as necessary
MS	X	–	–	X	X	as necessary
MP	X	–	–	X	X	as necessary
ACK	X	–	–	–	–	–
NAK	X	–	–	–	–	–
REQ	X	–	X	–	–	–

NOTE 1 – As defined in the tables in clause 9.3.4.
NOTE 2 – As defined in the tables in clause 9.4.
NOTE 3 – As defined in Figures 10 and 11 in clause 9.5.
NOTE 4 – Only used for REQ-RTX, as defined in clause 9.3.3.2.

10 ITU-T G.994.1 transactions

All permitted ITU-T G.994.1 transactions are described in this clause.

An overview of the set of basic transactions specified in this Recommendation and the use of ACK(1) is given in clause 10.1. The use of REQ-MS, REQ-MR and REQ-CLR to create extended transactions is described in clause 10.2. Message segmentation and the use of ACK(2) is discussed in clause 10.3. The complete specification of all state transitions permitted during an ITU-T G.994.1 session is contained in clause 10.4. The use of REQ-RTX to recover from the reception of an errored frame is described in clause 10.5.

Error recovery procedures and the use of NAK-EF are discussed in clause 12.

10.1 Basic transactions

Basic transactions may be classified as one of two types:

- those that exchange and negotiate capabilities between the HSTU-C and HSTU-R; and
- those that select a mode of operation.

Table 13 shows the set of basic transactions specified in this Recommendation. An "X" indicates that the basic transaction is supported for the stated version number (see clause 9.3.2) whilst a "–" indicates that it is not. Each transaction is initiated by the HSTU-R and ends with an ACK(1). With basic transactions, the HSTU-R controls the negotiation procedure. At the end of a basic ITU-T G.994.1 transaction, the stations shall either terminate the ITU-T G.994.1 session (applies to transactions A, B, C and D) as specified in clause 11.3, or shall go to the initial HSTU-x transaction state (applies to transaction C only) as shown in Figures 12.1 to 12-3, or 13.1 to 13.3.

NOTE – The continuation of ITU-T G.994.1 modulation after the conclusion of the ITU-T G.994.1 session, for the purpose of implementing other protocols (for example [ITU-T G.997.1] – see Table 10), is for further study.

Table 13 – Basic ITU-T G.994.1 transactions

Transaction identifier	HSTU-R	HSTU-C	HSTU-R	ITU-T G.994.1 version 1 support	ITU-T G.994.1 versions 2 and 3 support
A	MS →	ACK(1)		X	X
B	MR →	MS →	ACK(1)	X	X
C	CLR →	CL →	ACK(1)	X	X
D	MP →	MS →	ACK(1)	–	X

10.1.1 Transaction A

In transaction A, the HSTU-R selects a mode of operation and requests that the HSTU-C transition to the selected mode. When the HSTU-C responds with an ACK(1) message, both stations shall transition to the selected mode.

If the HSTU-R cannot determine a common mode of operation (either standard or non-standard) from previous capabilities exchanges, or is not prepared to select a mode at this time, it shall send an MS message with the non-standard field bit in Table 8 and all coding points in Tables 10 and 11 set to binary ZERO. When the HSTU-C receives this message, it shall respond with an ACK(1) message. The HSTU-R shall then initiate the cleardown procedure specified in clause 11.3.

10.1.2 Transaction B

In transaction B, the HSTU-R requests that the HSTU-C select the mode of operation. The HSTU-C selects the mode by transmitting an MS message. When the HSTU-R responds with an ACK(1) message, both stations shall transition to the selected mode.

If the HSTU-C cannot determine a common mode of operation (either standard or non-standard) from previous capabilities exchanges, or is not prepared to select a mode at this time, it shall send an MS message with the non-standard field bit in Table 8 and all coding points in Tables 10 and 11 set to binary ZERO. When the HSTU-R receives this message, it shall respond with an ACK(1) message. The HSTU-C shall then initiate the cleardown procedure specified in clause 11.3.

10.1.3 Transaction C

In transaction C, capabilities are exchanged and negotiated by the two stations. Transaction C shall be followed by either transaction A, transaction B or transaction D during the same session to select a common mode of operation identified during the capabilities exchange.

10.1.4 Transaction D

In transaction D, the HSTU-R proposes a mode of operation and requests that the HSTU-C select the mode of operation. The HSTU-C selects the mode by transmitting an MS message. When the HSTU-R responds with an ACK(1) message, both stations shall transition to the selected mode.

If the HSTU-C cannot determine a common mode of operation (either standard or non-standard) from previous capabilities exchanges, or is not prepared to select a mode at this time, it shall send an MS message with the non-standard field bit in Table 8 and all coding points in Tables 10 and 11 set to binary ZERO. When the HSTU-R receives the MS message, it shall respond with an ACK(1) message. The HSTU-C shall then initiate the cleardown procedure specified in clause 11.3.

10.2 Extended transactions

Table 14 shows the set of extended transactions specified in this Recommendation. An "X" indicates that the extended transaction is supported for the stated version number (see clause 9.3.2) whilst a "–" indicates that it is not. Each transaction is initiated by the HSTU-R and ends with an ACK(1). Extended transactions are derived from a concatenation of two basic transactions. They are used when

the HSTU-C wishes to control the negotiation procedure. At the end of an extended ITU-T G.994.1 transaction, the stations shall either terminate the ITU-T G.994.1 session as specified in clause 11.3, or shall go to the initial HSTU-x transaction state as shown in Figures 12.1 to 12-3, or 13.1 to 13.3.

NOTE – The continuation of ITU-T G.994.1 modulation after the conclusion of the ITU-T G.994.1 session, for the purpose of implementing other protocols (for example [ITU-T G.997.1] – see Table 10), is for further study.

Table 14 – Extended ITU-T G.994.1 transactions

Transaction identifier	HSTU-R	HSTU-C	HSTU-R	HSTU-C	HSTU-R	ITU-T G.994.1 version 1 support	ITU-T G.994.1 versions 2 and 3 support
A:B	MS →	REQ-MR →	MR →	MS →	ACK(1)	X	X
B:A	MR →	REQ-MS →	MS →	ACK(1)		X	X
A:C	MS →	REQ-CLR →	CLR →	CL →	ACK(1)	X	X
B:C	MR →	REQ-CLR →	CLR →	CL →	ACK(1)	X	X
D:C	MP →	REQ-CLR →	CLR →	CL →	ACK(1)	–	X

10.2.1 Transaction A:B

In transaction A:B, the HSTU-R selects a mode of operation and requests that the HSTU-C transition to the selected mode. However, rather than responding to the MS message with an ACK(1) message as is the case for basic transaction A, the HSTU-C responds to the MS message with a REQ-MR message requesting the HSTU-R to proceed directly into basic transaction B without returning to the initial transaction state.

10.2.2 Transaction B:A

In transaction B:A, the HSTU-R requests that the HSTU-C select the mode of operation. However, rather than responding to the MR message with an MS message as is the case for basic transaction B, the HSTU-C responds to the MR message with a REQ-MS message requesting the HSTU-R to proceed directly into basic transaction A without returning to the initial transaction state.

10.2.3 Transaction A:C

In transaction A:C, the HSTU-R selects a mode of operation and requests that the HSTU-C transition to the selected mode. However, rather than responding to the MS message with an ACK(1) message as is the case for basic transaction A, the HSTU-C responds to the MS message with a REQ-CLR message requesting the HSTU-R to proceed directly into basic transaction C without returning to the initial transaction state.

10.2.4 Transaction B:C

In transaction B:C, the HSTU-R requests that the HSTU-C select the mode of operation. However, rather than responding to the MR message with an MS message as is the case for basic transaction B, the HSTU-C responds to the MR message with a REQ-CLR message requesting the HSTU-R to proceed directly into a transaction C without returning to the initial transaction state.

10.2.5 Transaction D:C

In transaction D:C, the HSTU-R proposes a mode of operation and requests that the HSTU-C select the mode of operation. However, rather than responding to the MP message with an MS message as is the case for basic transaction D, the HSTU-C responds to the MP message with a REQ-CLR message requesting the HSTU-R to proceed directly into basic transaction C without returning to the initial transaction state.

10.3 Message segmentation

Not including the two octets of FCS and any octets that have been inserted to achieve octet transparency (see clause 8.4), the maximum number of octets in any frame shall be 64. If the message exceeds this limit, the remainder of the message may be contained in subsequent frames. Whether or not the message exceeds 64 octets, it may be split into segments.

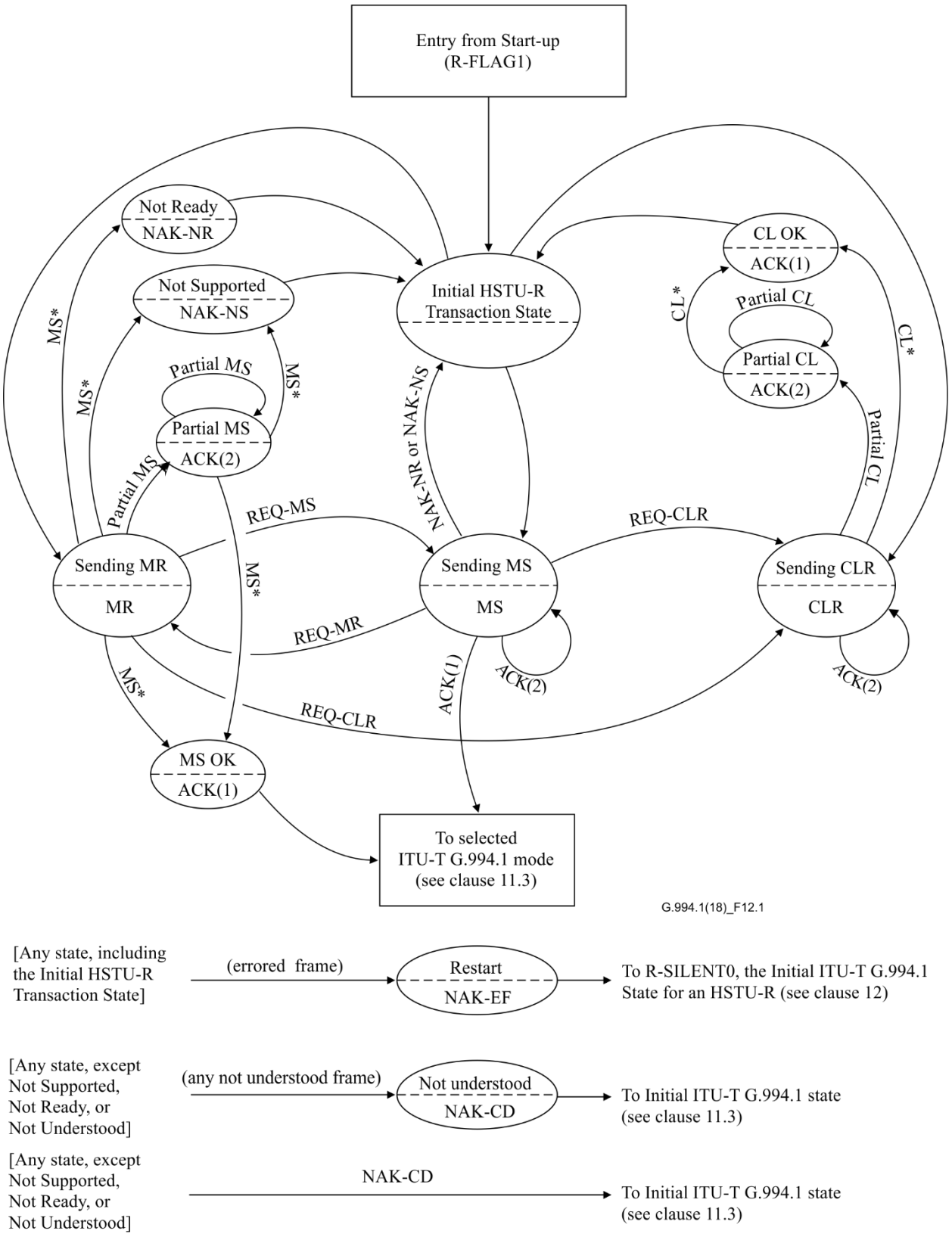
The receiving station shall parse the frame to determine if the message has been fully transmitted. If the message has not been fully transmitted, the receiving station may request transmission of the next segment by transmitting an ACK(2). Further segments shall only be sent in response to an ACK(2). Only CLR, CL, MP and MS messages may be segmented.

Where non-standard information is present in the message, the standard and non-standard information may be conveyed in separate frames.

10.4 State transition diagrams

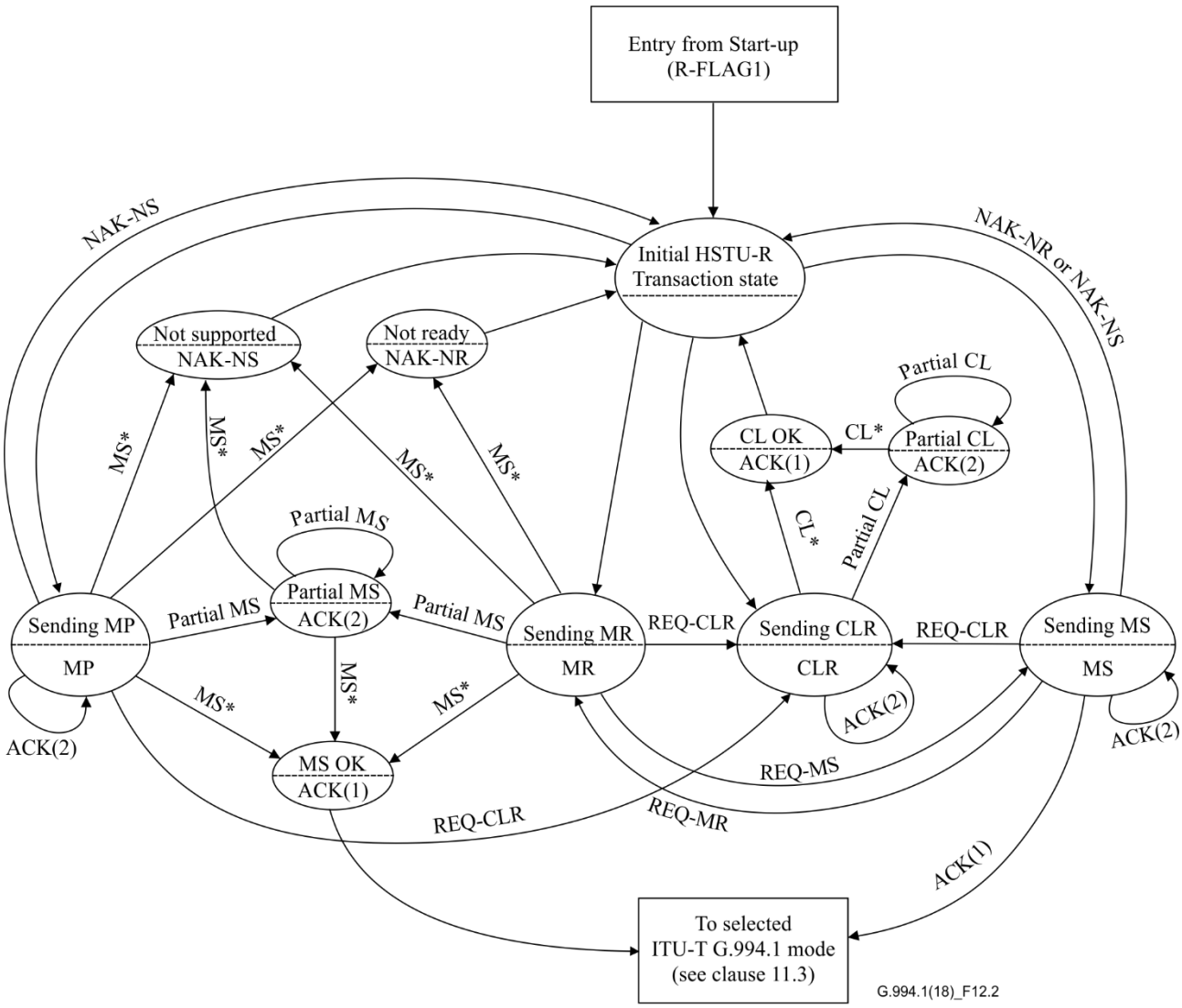
For equipment that conforms to ITU-T G.994.1 version 1 (see clause 9.3.2), Figures 12.1 and 13.1 specify all permitted state transitions for the HSTU-R and HSTU-C stations respectively. For equipment that conforms to ITU-T G.994.1 version 2 (see clause 9.3.2), Figures 12.2 and 13.2 specify all permitted state transitions for the HSTU-R and HSTU-C stations respectively. For equipment that conforms to ITU-T G.994.1 version 3 (see clause 9.3.2), Figures 12.3 and 13.3 specify all permitted state transitions for the HSTU-R and HSTU-C stations respectively.

The state transition diagrams show state information (the state name and current transmitted message) and transition information (received message that caused the state change).



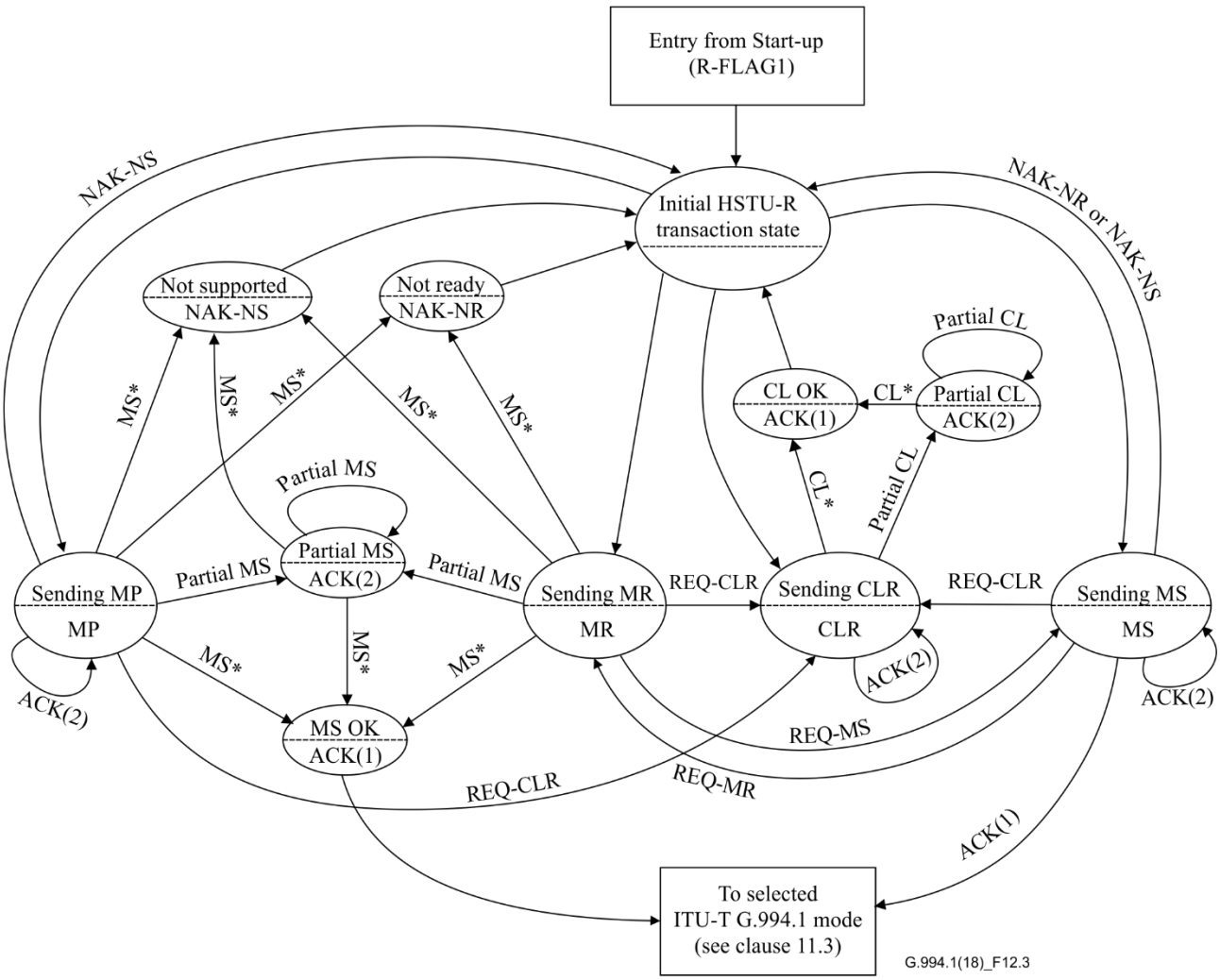
NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

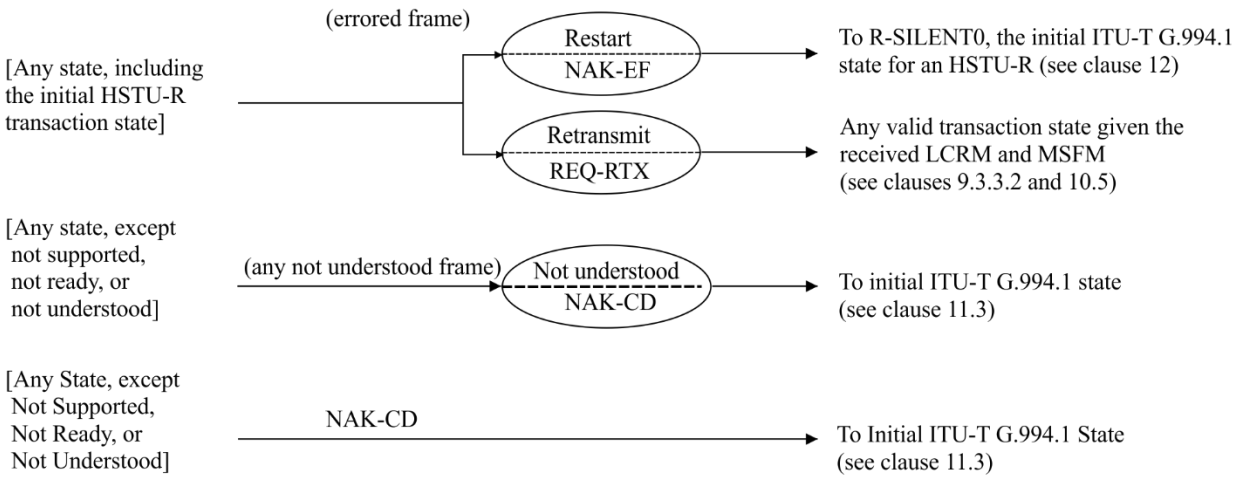
Figure 12.1 – HSTU-R state transition diagram (version 1)



NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

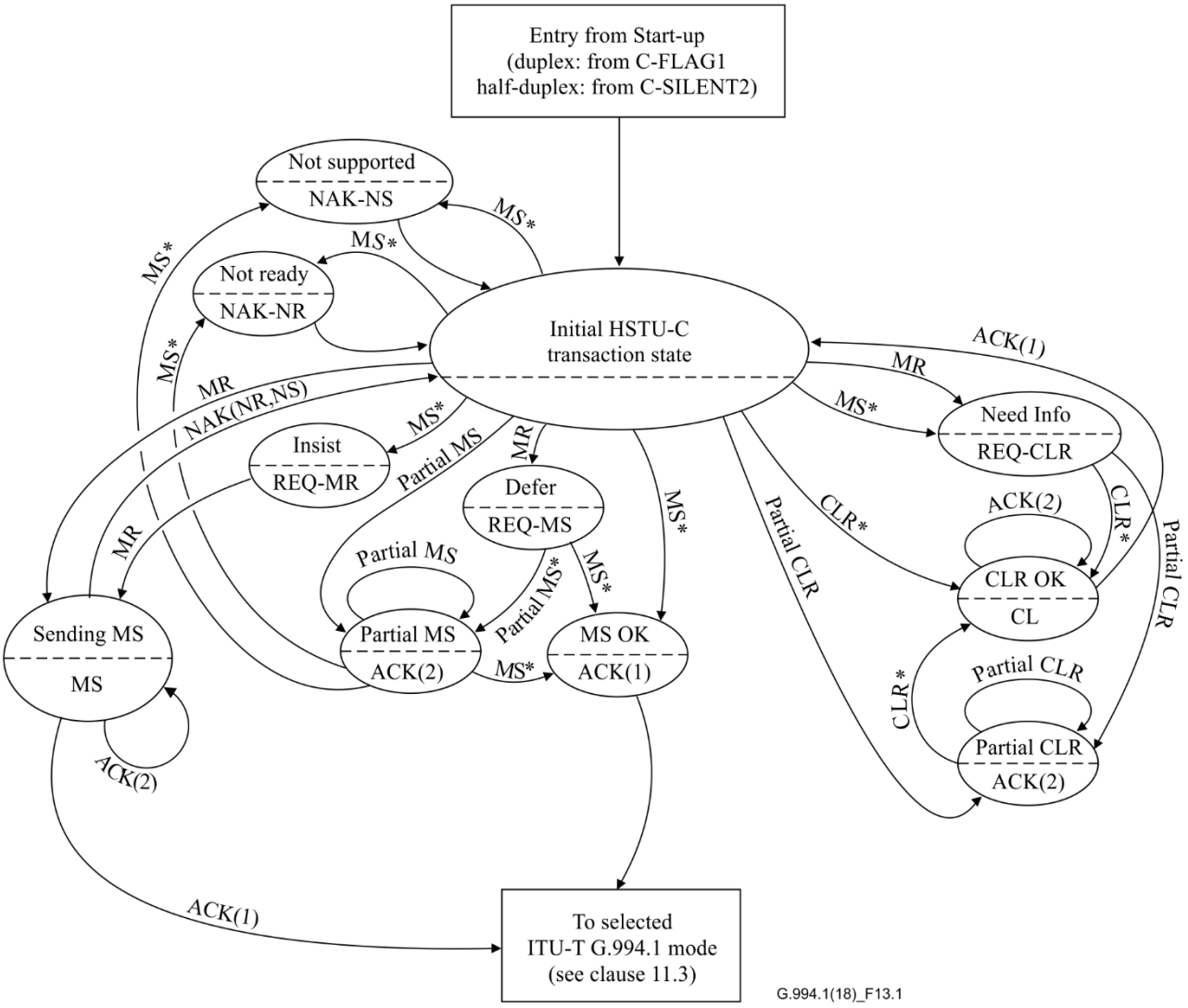
Figure 12.2 – HSTU-R state transition diagram (version 2)

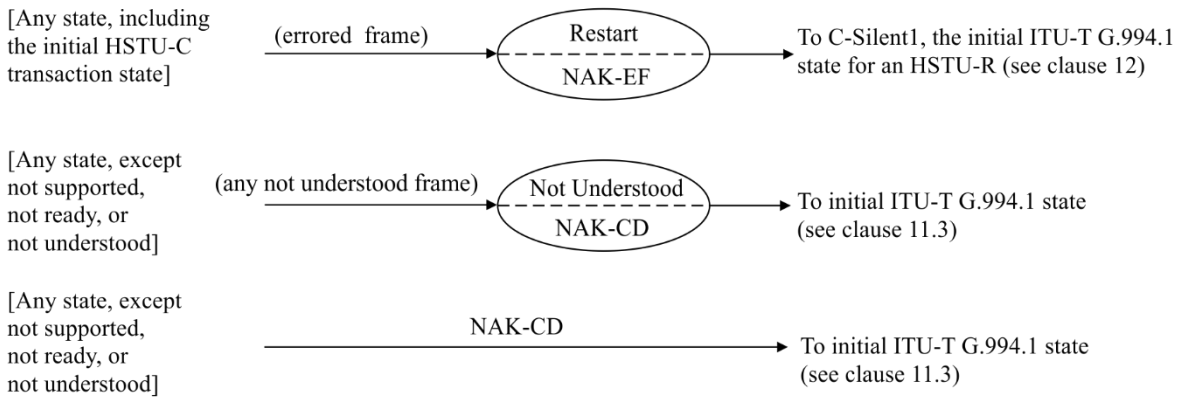




NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

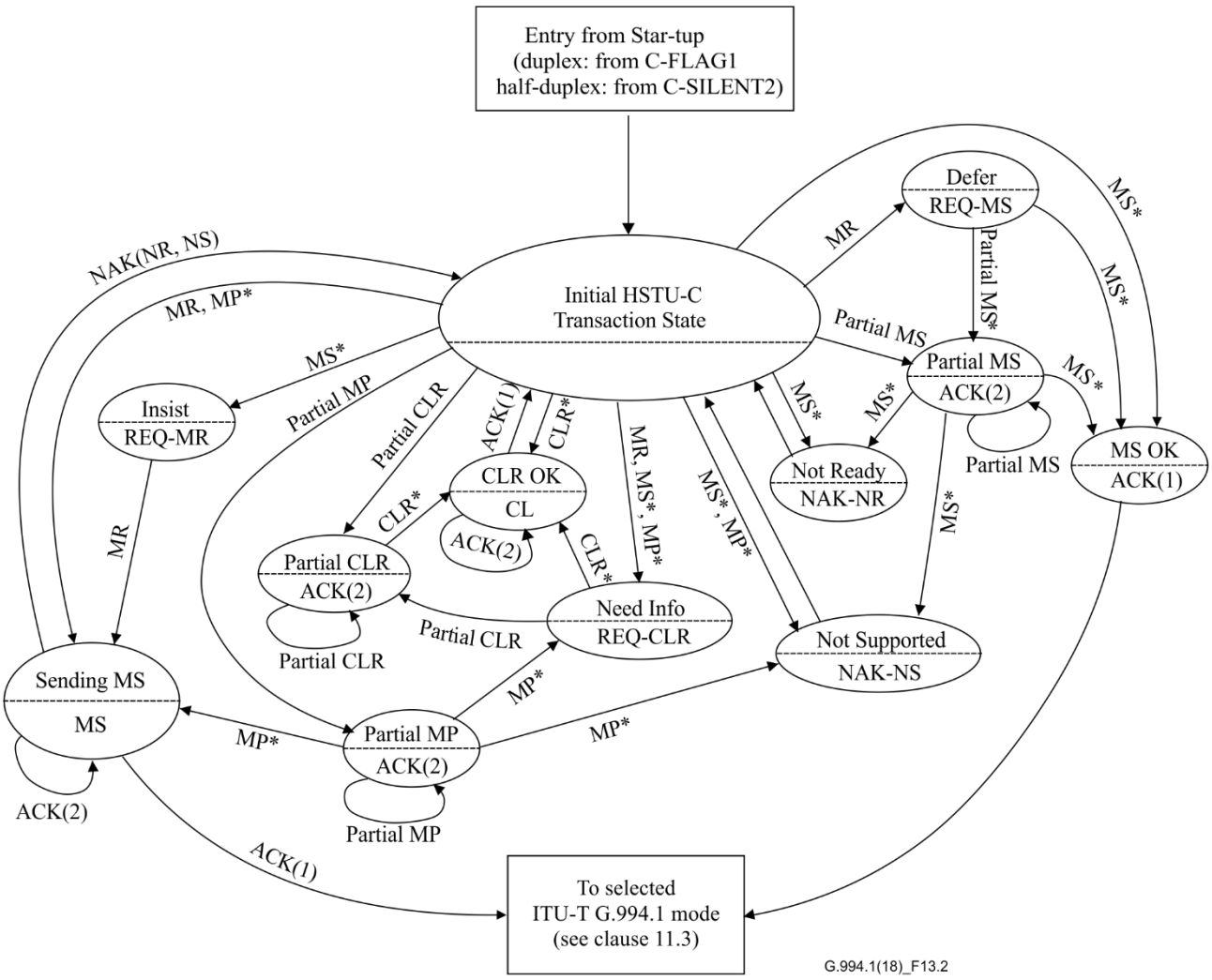
Figure 12.3 – HSTU-R state transition diagram (version 3)





NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

Figure 13.1 – HSTU-C state transition diagram (version 1)



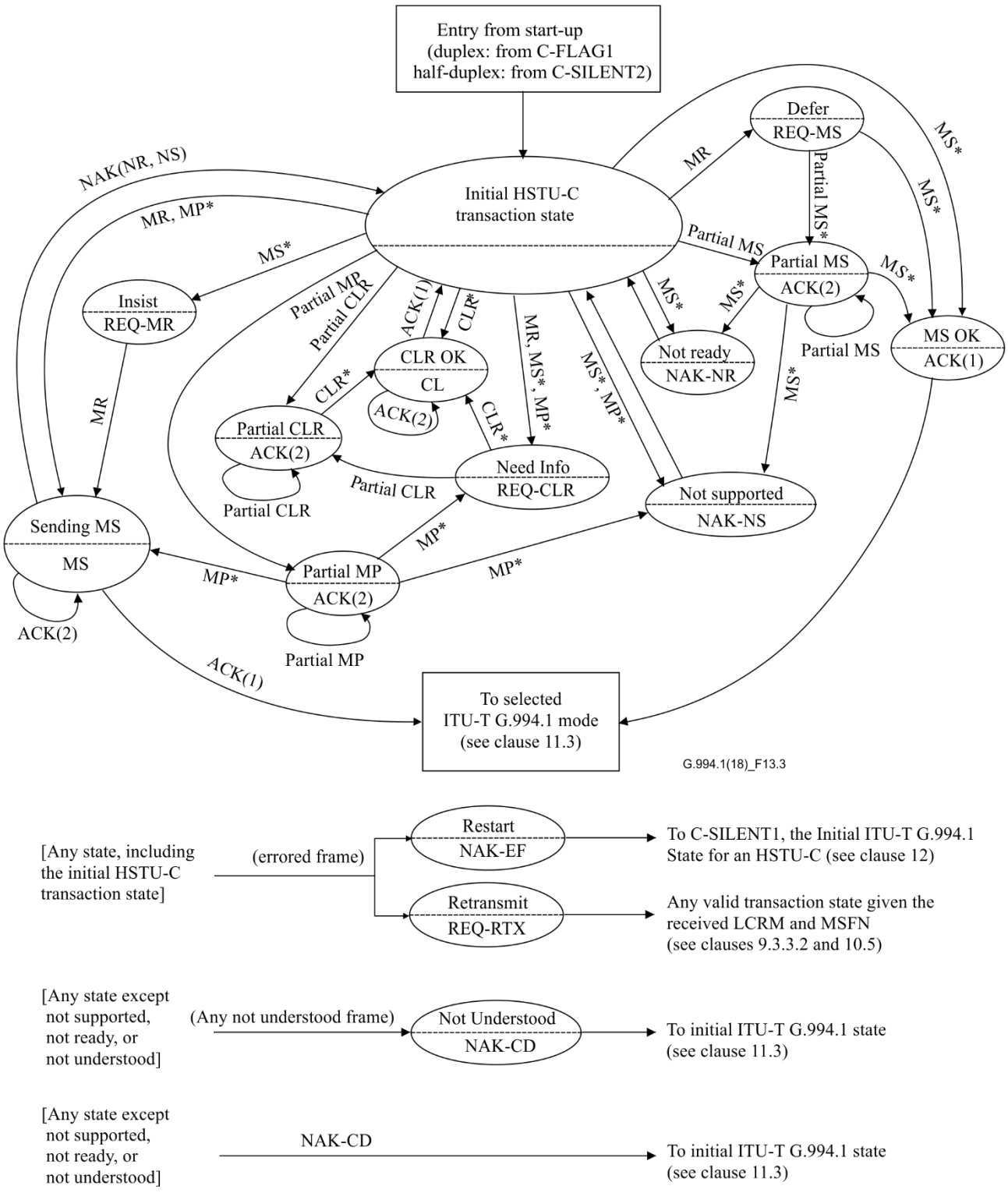
[Any state, including the initial HSTU-C transaction state] — (errored frame) → Restart NAK-EF → To C-SILENT1, the initial ITU-T G.994.1 state for an HSTU-C (see clause 12)

[Any state except not supported, not ready, or not understood] — (Any not understood frame) → Not understood NAK-CD → To initial ITU-T G.994.1 state (see clause 11.3)

[Any state except not supported, not ready, or not understood] — NAK-CD → To initial ITU-T G.994.1 state (see clause 11.3)

NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

Figure 13.2 – HSTU-C state transition diagram (version 2)



NOTE – Message names followed by an asterisk (*) indicate that the state transition may be taken upon the reception of a complete message, or upon the reception of one or more segments of the message.

Figure 13.3 – HSTU-C state transition diagram (version 3)

Transmission of signals associated with a selected mode shall follow the transmission of ACK(1) and the ITU-T G.994.1 cleardown procedure. The time delay between the end of an ITU-T G.994.1 session and the start of the selected mode is specified in the associated Recommendation.

10.5 Retransmission transactions

Retransmission transactions occur whenever an HSTU receives an errored frame and wishes to transmit the REQ-RTX message to initiate a retransmission instead of transmitting the NAK-EF message.

Tables 15 and 16 show the set of retransmission transactions specified in this Recommendation. An "X" indicates that the transaction is supported for the stated version number (see clause 9.3.2) whilst a "–" indicates that it is not.

Table 15 – Retransmission ITU-T G.994.1 transaction RA

Transaction identifier	HSTU-C	HSTU-R	ITU-T G.994.1 version 1 support	ITU-T G.994.1 version 2 support	ITU-T G.994.1 version 3 support
RA	REQ-RTX	(Note)	–	–	X
NOTE – Any frame that complies with the transaction rules that could follow the frame indicated in the LCRM and MSFN octets of the REQ-RTX message.					

Table 16 – Retransmission ITU-T G.994.1 transaction RB

Transaction identifier	HSTU-R	HSTU-C	ITU-T G.994.1 version 1 support	ITU-T G.994.1 version 2 support	ITU-T G.994.1 version 3 support
RB	REQ-RTX	(Note)	–	–	X
NOTE – Any frame that complies with the transaction rules that could follow the frame indicated in the LCRM and MSFN octets of the REQ-RTX message.					

10.5.1 Transaction RA

In transaction RA, the HSTU-C receives a frame that contains an FCS error. The HSTU-C shall transmit a REQ-RTX message with the LCRM and MSFN octets encoded as described in clause 9.3.3.2.

Upon correctly receiving the REQ-RTX message, the HSTU-R shall transmit any frame that complies with the transaction rules that could follow the frame indicated in the LCRM and MSFN octets of the REQ-RTX message.

The HSTU-C shall send no more than three consecutive REQ-RTX messages. Instead of a fourth consecutive REQ-RTX message, the HSTU-C shall send a NAK-CD message to cleardown the session.

If the HSTU-R cannot determine the state of the session when it receives a REQ-RTX message, it shall transmit a NAK-CD message to cleardown the session.

10.5.2 Transaction RB

In transaction RB, the HSTU-R receives a frame that contains an FCS error. The HSTU-R shall transmit a REQ-RTX message with the LCRM and MSFN octets encoded as described in clause 9.3.3.2.

Upon correctly receiving the REQ-RTX message, the HSTU-C shall transmit any frame that complies with the transaction rules that could follow the frame indicated in the LCRM and MSFN octets of the REQ-RTX message.

If the HSTU-C receives a REQ-RTX message with LCRM set to NULL, it shall respond with a NAK-CD message to cleardown the session.

The HSTU-R shall send no more than three consecutive REQ-RTX messages. Instead of a fourth consecutive REQ-RTX message, the HTU-R shall send a NAK-CD message to cleardown the session.

If the HSTU-C cannot determine the state of the session when it receives a REQ-RTX message, it shall transmit a NAK-CD message to cleardown the session.

11 Start-up/cleardown procedures

11.1 Duplex start-up procedures

11.1.1 HSTU-R initiated start-up procedure

Figure 14 displays the timing for the HSTU-R initiated duplex start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence, and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-R shall initiate the start-up procedure by transmitting signals from one or both of its signalling families, with phase reversals every 16 ms (R-TONES-REQ). When this has been detected by the HSTU-C, the HSTU-C shall respond by transmitting signals from one or both of its signalling families (C-TONES). When this has been detected by the HSTU-R, the HSTU-R shall transmit silence (R-SILENT1) for 50 to 500 ms and shall then transmit signals from only one signalling family (R-TONE1). The minimum detection time for C-TONES shall be 50 ms. When the HSTU-C has detected R-TONE1, it shall respond by transmitting Galfs (pattern 1000|0001) on modulated carriers (C-GALF1). When the HSTU-R has detected Galfs, it shall respond by transmitting Flags on modulated carriers (R-FLAG1). When the HSTU-C has detected Flags, it shall respond by transmitting Flags (C-FLAG1). When the HSTU-R has detected Flags, it shall begin the first transaction.

Figure 14 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-TONE1) to the transmission of the next signal (e.g., C-GALF1).

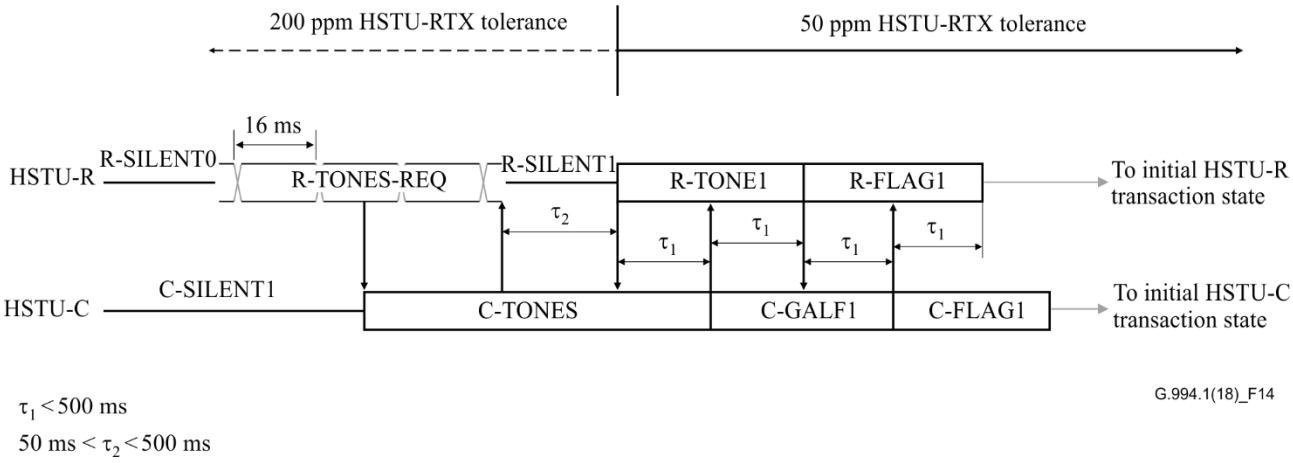


Figure 14 – HSTU-R initiated duplex start-up procedure

11.1.2 HSTU-C initiated start-up procedure

Figure 15 displays the timing for the HSTU-C initiated duplex start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-C shall initiate the start-up procedure by transmitting signals from one or both of its signalling families (C-TONES). When this has been detected by the HSTU-R, the HSTU-R shall respond by transmitting signals from only one signalling family (R-TONE1). The minimum detection time for C-TONES shall be 50 ms. When the HSTU-C has detected R-TONE1, it shall respond by transmitting Galfs on modulated carriers (C-GALF1). When the HSTU-R has detected Galfs, it shall respond by transmitting Flags on modulated carriers (R-FLAG1). When the

HSTU-C has detected Flags, it shall respond by transmitting Flags (C-FLAG1). When the HSTU-R has detected Flags, it shall begin the first transaction.

Figure 15 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-TONE1) to the transmission of the next signal (e.g., C-GALF1).

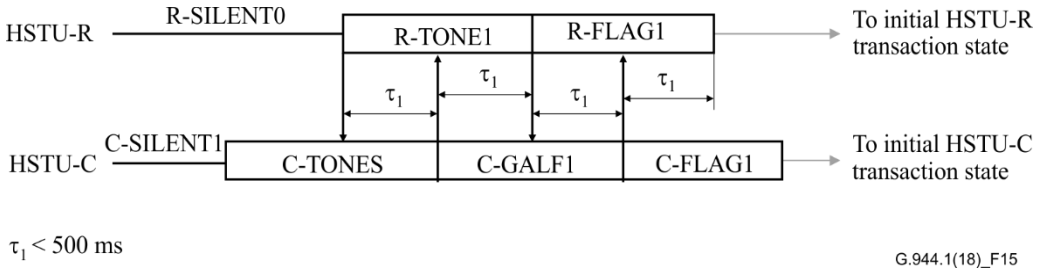


Figure 15 – HSTU-C initiated duplex start-up procedure

11.2 Half-duplex start-up procedures

11.2.1 HSTU-R initiated start-up procedure

Figure 16 displays the timing for the HSTU-R initiated half-duplex start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-R shall initiate the start-up procedure by transmitting signals from one or both of its signalling families, with phase reversals every 16 ms (R-TONES-REQ). When this has been detected by the HSTU-C, the HSTU-C shall respond by transmitting signals from one or both of its signalling families (C-TONES). When this has been detected by the HSTU-R, the HSTU-R shall transmit silence (R-SILENT1) for 50 to 500 ms and shall then transmit flags modulated on carriers from only one signalling family (R-FLAG1). The minimum detection time for C-TONES shall be 50 ms. When the HSTU-C has detected R-FLAG1, it shall respond by transmitting silence. When the HSTU-R has detected the silence, it shall continue to transmit Flags for period τ_1 and shall then begin the first transaction.

Figure 16 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-TONE1) to the transmission of the next signal (e.g., C-GALF1).

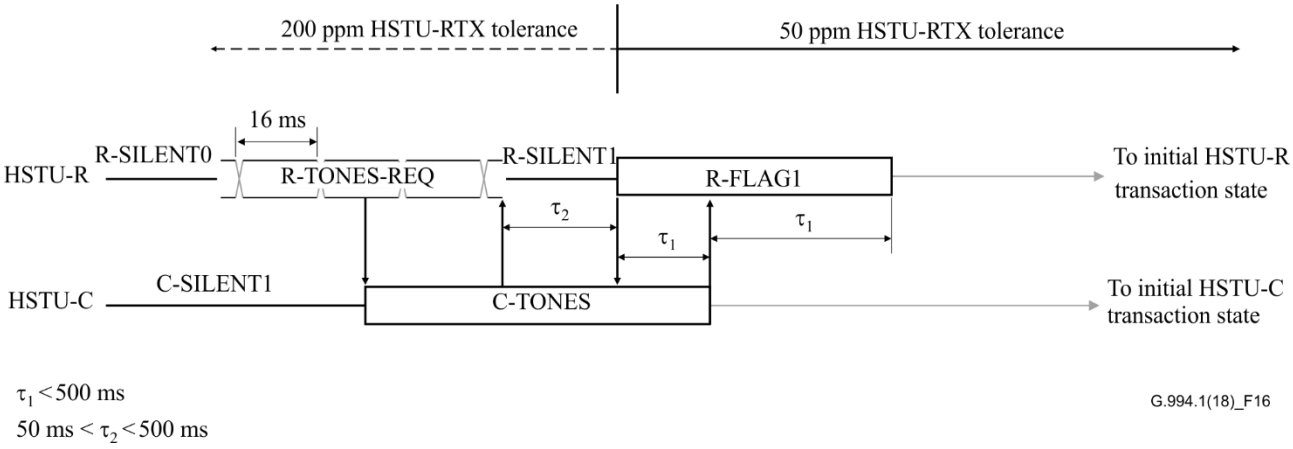


Figure 16 – HSTU-R initiated half-duplex start-up procedure

11.2.2 HSTU-C initiated start-up procedure

Figure 17 displays the timing for the HSTU-C initiated half-duplex start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence, and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-C shall initiate the start-up procedure by transmitting signals from one or both of its signalling families (C-TONES). When this has been detected by the HSTU-R, the

HSTU-R shall respond by transmitting flags modulated on carriers from only one signalling family (R-FLAG1). The minimum detection time for C-TONES shall be 50 ms. When the HSTU-C has detected R-FLAG1, it shall respond by transmitting silence. When the HSTU-R has detected the silence, it shall continue to transmit Flags for period τ_1 and shall then begin the first transaction.

Figure 17 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-TONE1) to the transmission of the next signal (e.g., C-GALF1).

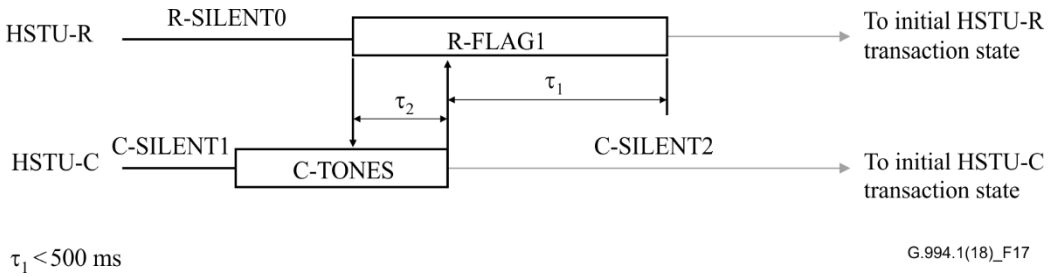


Figure 17 – HSTU-C initiated half-duplex start-up procedure

11.3 Cleardown procedure

Figure 18 displays the timing for cleardown of a duplex ITU-T G.994.1 session (by either the HSTU-R or the HSTU-C). When an HSTU-R (HSTU-C) receives an ACK(1) message in response to an MS message, or receives a NAK-CD message, it shall initiate the cleardown procedure. After receiving the ACK(1) or NAK-CD message, the HSTU-R (HSTU-C) shall continue to transmit flags for a period not to exceed 0.5 s. It shall then transmit 4 octets of Galf (referred to as R-GALF2 for an HSTU-R, C-GALF2 for an HSTU-C), followed by silence which terminates the ITU-T G.994.1 session. When the HSTU-C (HSTU-R) detects either Galfs or silence, it shall continue to transmit flags (referred to as C-FLAG2 for an HSTU-C, R-FLAG2 for an HSTU-R) for a period not to exceed 0.5 s, followed by silence which terminates the ITU-T G.994.1 session.

If a received MS message indicates a common operating mode, both stations shall transition to the selected mode upon termination of the ITU-T G.994.1 session. If a received MS message indicates that there is no common operating mode (see clause 10.1), or the cleardown was initiated by a NAK-CD, both stations shall return to the initial ITU-T G.994.1 state (R-SILENT0 for an HSTU-R, C-SILENT1 for an HSTU-C).

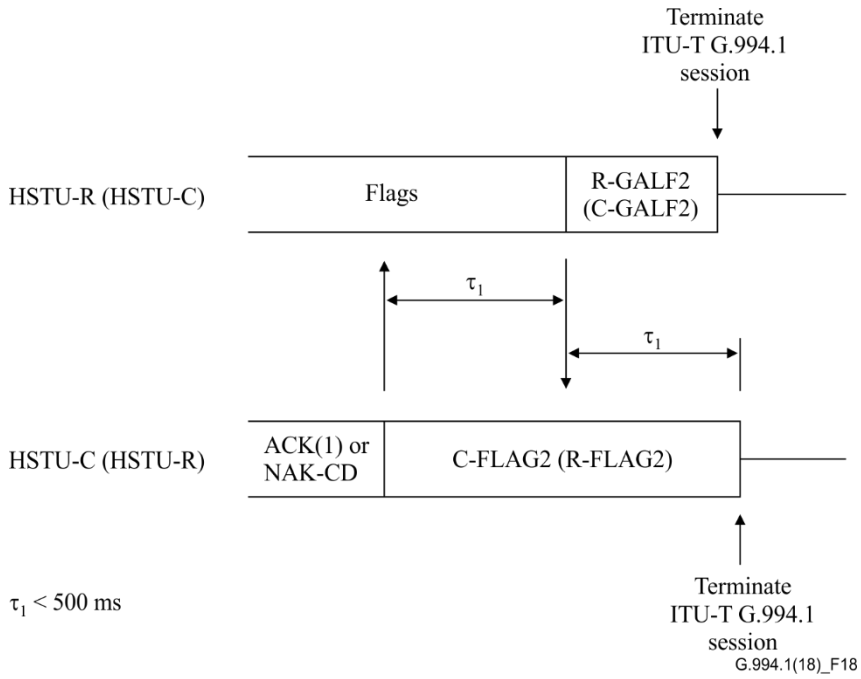


Figure 18 – Duplex cleardown procedure

Figure 19 displays the timing for cleardown of a half-duplex ITU-T G.994.1 session (by either the HSTU-R or the HSTU-C). When an HSTU-R (HSTU-C) receives an ACK(1) message in response to an MS message or receives NAK-CD messages, it shall initiate the cleardown procedure.

After receiving the ACK(1) or NAK-CD message, the HSTU-R (HSTU-C) shall continue to transmit silence for a period not to exceed 0.5 s. It shall then transmit 4 octets of Galf (referred to as R-GALF2 for an HSTU-R, C-GALF2 for an HSTU-C), followed by silence which terminates the ITU-T G.994.1 session.

When the HSTU-C (HSTU-R) detects either Galfs or continued silence after a timeout of 0.5 s, it shall continue to transmit silence for a period not to exceed 0.5 s and then terminate the ITU-T G.994.1 session.

If a received MS message indicates a common operating mode, both stations shall transition to the selected mode upon termination of the ITU-T G.994.1 session. If a received MS message indicates that there is no common operating mode (see clause 10.1) or cleardown was initiated by a NAK-CD, both stations shall return to the initial ITU-T G.994.1 state (R-SILENT0 for an HSTU-R, C-SILENT1 for an HSTU-C).

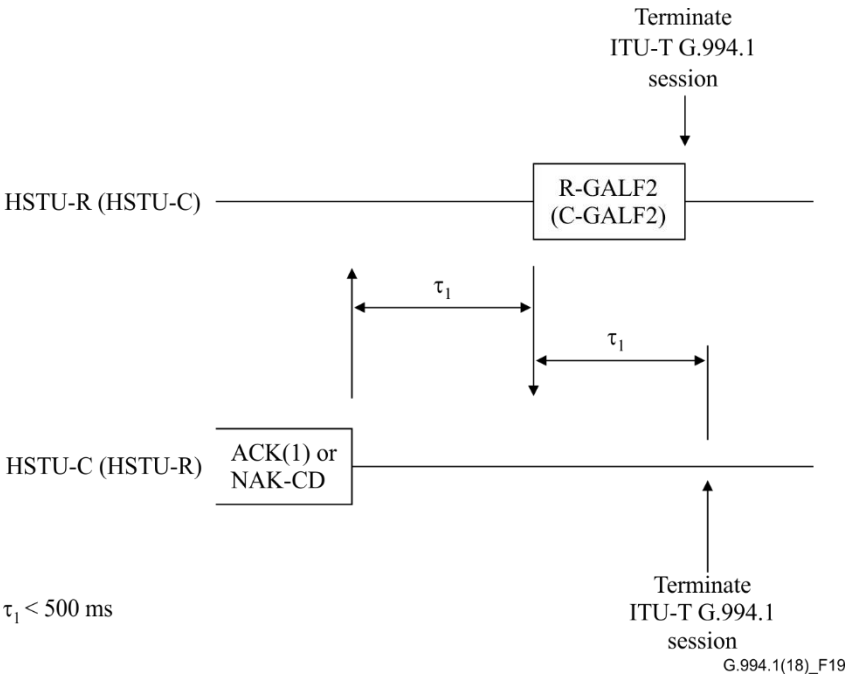


Figure 19 – Half-duplex cleardown procedure

12 Error recovery procedures

The timing requirements used for error recovery during the start-up procedure of an ITU-T G.994.1 session are specified in Figures 14 to 17.

During an ITU-T G.994.1 session, the maximum time between the reception of the end of any frame and the start of transmission of the next frame except the REQ-RTX message shall be 0.5 s.

During an ITU-T G.994.1 session, for transactions where the HSTU-R transmits the final message, the maximum time between the end of transmission of the final frame of the transaction and the start of transmission of the first frame of the next transaction shall be 0.5 s.

During an ITU-T G.994.1 session, the minimum time a station shall wait after transmitting a frame shall be 1.25 s. If either station times out, it shall immediately return to the initial ITU-T G.994.1 state (R-SILENT0 for an HSTU-R, C-SILENT1 for an HSTU-C) and remain silent for a minimum period of 0.5 s. It may then initiate another ITU-T G.994.1 session.

If an errored frame is received in any state (including the initial HSTU-x transaction state), the receiving station shall either:

1) transmit a REQ-RTX message according to the transactions of clause 10.5; or

2) abort the ITU-T G.994.1 session by sending a NAK-EF message.

If NAK-EF is transmitted, it shall then return immediately to the initial ITU-T G.994.1 state (R-SILENT0 for an HSTU-R, C-SILENT1 for an HSTU-C) and remain silent for a minimum period of 0.5 s. It may then initiate another ITU-T G.994.1 session.

If a REQ-RTX message is to be transmitted, the minimum time a station shall wait after the reception of any non-invalid frame shall be 0.75 s. If a station is receiving non-flag octets that are longer than an invalid frame, it shall defer transmitting REQ-RTX, otherwise the maximum time a station shall wait after the reception of any non-invalid frame is 1.0 s.

If a NAK-EF message is received in any state, the receiving station shall return immediately to the initial ITU-T G.994.1 state (R-SILENT0 for an HSTU-R, C-SILENT1 for an HSTU-C) and remain silent for a minimum period of 0.5 s. It may then initiate another ITU-T G.994.1 session.

If an invalid frame is received in any state, it shall be ignored.

13 Downstream maximum PSD control parameters

The downstream maximum PSD control parameters are derived from the downstream maximum PSD (MAXHSPSDds) managed object defined in clause M.2.1.

13.1 GHS A43 carrier set maximum PSD level in downstream

The control parameter *ghs_A43_maxpsdds* is defined as the maximum transmit PSD level for each individual G.hs carrier of the A43 carrier set in the downstream direction for the case when all downstream carriers of the carrier set are transmitted at the same level. The PSD level (in dBm/Hz) is calculated as the carrier power averaged over a 4.3125 kHz bandwidth. The mandatory range to be supported by the HSTU-C is from –71.5 to –40 dBm/Hz, with 0.5 dB steps. If the value is set to the value –99, then the HSTU-C shall not transmit this carrier set.

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set A43 as conveyed in the NPar(2) in Table 9.17 shall comply with the following constraint:

$$-3.65 - Attenuation - 36.35 \leq ghs_{A43_{maxpsdds}}$$

13.2 GHS A43c and B43C carrier set maximum PSD level in downstream

The control parameter *ghs_AB43c_maxpsdds* is defined as the maximum transmit PSD level for each individual G.hs carrier of the A43c and B43C carrier set in the downstream direction for the case when all downstream carriers of the carrier set are transmitted at the same level. The PSD level (in dBm/Hz) is calculated as the carrier power averaged over a 4.3125 kHz bandwidth. The mandatory range to be supported by the HSTU-C is from –71.5 to –40 dBm/Hz, with 0.5 dB steps. If the value is set to the value –99, then the HSTU-C shall not transmit this carrier set.

If the carrier set is transmitted by the HSTU-C, the value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set A43c as conveyed in the NPar(2) in Table 9.17 shall comply with the following constraint:

$$-3.65 - Attenuation_A43c - 36.35 \leq ghs_AB43c_maxpsdds$$

If the carrier set is not transmitted by the HSTU-C, the Npar(2) shall not be included.

If the carrier set is transmitted by the HSTU-C, the value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set B43c as conveyed in the NPar(2) in Table 9.45 shall comply with the following constraint:

$$-3.65 - Attenuation_B43c - 36.35 \leq ghs_AB43c_maxpsdds$$

If the carrier set is not transmitted by the HSTU-C, the Npar(2) shall not be included.

13.3 GHS B43 and J43 carrier set maximum PSD level in downstream

The control parameter *ghs_BJ43_maxpsdds* is defined as the maximum transmit PSD level for each individual G.hs carrier of the B43 and J43 carrier set in the downstream direction for the case when all downstream carriers of the carrier set are transmitted at the same level. The PSD level (in dBm/Hz) is calculated as the tone power averaged over a 4.3125 kHz bandwidth. The mandatory range to be supported by the HSTU-C is from –80 to –40 dBm/Hz, with 0.5 dB steps. If the value is set to the value –99, then the HSTU-C shall not transmit this carrier set.

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set B43 as combined from the NPar(2) in Tables 9.21 and 9.21.1 shall comply with the following constraint:

$$-3.65 - Attenuation_B43 - 36.35 \leq ghs_BJ43c_maxpsdds$$

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set B43 as conveyed in the NPar(2) in Table 9.21 shall correspond with the actual attenuation clipped to a range of 31.5 dB as following:

$$Attenuation_B43_clipped = \min(31.5, Attenuation_B43)$$

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set B43 as conveyed in the NPar(2) in Table 9.21.1 shall correspond with the remainder of the actual attenuation as following:

$$Attenuation_B43_remainder = Attenuation_B43 - Attenuation_B43_clipped$$

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set J43 as combined from the NPar(2) in Tables 9.41 and 9.41.1 shall comply with the following constraint:

$$-3.65 - Attenuation_J43 - 36.35 \leq ghs_BJ43c_maxpsdds$$

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set J43 as conveyed in the NPar(2) in Table 9.41 shall correspond with the actual attenuation clipped to a range of 31.5 dB as following:

$$Attenuation_J43_clipped = \min(31.5, Attenuation_J43)$$

The value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set J43 as conveyed in the NPar(2) in Table 9.41.1 shall correspond with the remainder of the actual attenuation as following:

$$Attenuation_J43_remainder = Attenuation_J43 - Attenuation_J43_clipped$$

13.4 GHS V43 carrier set maximum PSD level in downstream

The three control parameters *ghs_V43_257_maxpsdds*, *ghs_V43_383_maxpsdds* and *ghs_V43_511_maxpsdds* are defined as the maximum transmit PSD level for each individual G.hs carrier of the V43 carrier set in the downstream direction. The PSD level (in dBm/Hz) is calculated as the carrier power averaged over a 4.3125 kHz bandwidth. The mandatory range to be supported by the HSTU-C is from –98.5 to –40 dBm/Hz, with 0.5 dB steps. If the value is set to the value –99, then the HSTU-C shall not transmit this carrier.

If at least one carrier of the carrier set is transmitted by the HSTU-C, the value of the attenuation in ITU-T G.994.1 transmit power per carrier for carrier set V43 shall be reported in the NPar(2) in Table 9.49.x as well as in the corresponding NPar(2) relative power level for downstream carrier with frequency index N (see clause 13.5).

If the carrier set is not transmitted by the HSTU-C, the Npar(2) shall not be included.

13.5 GHS individual carrier maximum PSD level in downstream

The control parameter *ghs_carrier_N_maxpsdds* is defined as the maximum transmit PSD level for an individual G.hs carrier with frequency index N in the downstream direction. Valid values for N are 12, 14, 40, 56, 64, 72, 88, 96, 240, 257, 276, 293, 312, 337, 383, 511, 4368, 4440, 4488, 4680, 4728.

The PSD level (in dBm/Hz) is calculated as the carrier power averaged over a 4.3125 kHz bandwidth. The mandatory range to be supported by the HSTU-C is from –98.5 to –40 dBm/Hz, with 0.5 dB steps. If the value is set to the value –99, the HSTU-C shall not transmit this carrier.

If a carrier of the following list of frequency indices N = 12, 14, 40, 56, 64, 72, 88, 96, 257, 293, 337, 383, 511, is transmitted by the HSTU-C, the value of the attenuation of that carrier as conveyed in the NPar(2) relative power level for downstream carrier with frequency index N parameter shall comply with the following constraint:

$$-3.65 - Attenuation - 36.35 \leq ghs_carrier_N_maxpsdds$$

If the carrier is not transmitted by the HSTU-C, the Spar(1) bit shall be set to ZERO and the associated Npar(2) octets shall not be included.

Annex A

Support for legacy non-ITU-T G.994.1 devices

(This annex forms an integral part of this Recommendation.)

Systems that support interoperability with non-ITU-T G.994.1-compliant devices shall perform the following procedure at initialization.

The HSTU-R shall alternately attempt ITU-T G.994.1 and other non-ITU-T G.994.1 initialization as follows:

– transmit R-TONES-REQ for 2 s;

– transmit silence for 100 ms;

– transmit other non-ITU-T G.994.1 initiating signal for 2 s;

– transmit silence for 100 ms;

– repeat above (starting with R-TONES-REQ).

Manufacturers are encouraged to implement multimode systems to cover this interoperability issue.

NOTE – Future handshake protocols may modify the sequence described in this annex. Implementations are encouraged to tolerate such differences.

Annex B

Operation over multiple wire pairs

(This annex forms an integral part of this Recommendation.)

Some HSTU-x devices may support operation over multiple wire pairs as either a primary or secondary mode of operation. For these devices, the following additions shall be made to the start-up procedures shown in clauses 11.1 and 11.2:

- R-TONES-REQ (for HSTU-R initiated start-up) and C-TONES shall be transmitted simultaneously on all available wire pairs.
- The HSTU-R shall select an active wire pair from the set of pairs on which it receives C-Tones.

  NOTE – The criterion for active pair selection is implementation-dependent; however, implementors are strongly encouraged to consider acceptable performance as a part of the selection process.
- R-TONE1, R-FLAG1 and all succeeding signals transmitted by the HSTU-R shall only be transmitted on the selected active wire pair. Silence shall be sent on any other pairs.
- The HSTU-C shall designate the pair on which R-TONE1 and/or R-FLAG1 is received as its active pair.
- All succeeding signals transmitted by the HSTU-C shall only be transmitted on the designated active wire pair. Silence shall be sent on any other pairs.

Annex C

An operating mode for use in the same cable as TCM-ISDN

(This annex forms an integral part of this Recommendation.)

C.1 Scope (supplements clause 1)

This annex defines an enhanced mode of operation for use by xDSL systems coexisting in the same binder as TCM-ISDN as defined in Appendix III of Recommendation ITU-T G.961. The clauses in this annex provide supplementary and replacement material to the clauses in the main body. The nature of the material is parenthetically indicated in the clause heading. The modifications described in this annex allow a performance improvement from the system specified in the main body in an environment coexisting with TCM-ISDN in the same cable. This enhanced mode of operation uses two new modulation methods:

- TTR synchronized (TTRS) modulation – Signalling is synchronized to the TTR clock and transmission occurs during TCM-ISDN FEXT periods, and
- Duplex 1/2 symbol rate (DHSR) modulation – The symbol rate used with carrier set C43 is 4312.5/16 = 269.53125 symbols per second as opposed to 4312.5/8 = 539.0625 symbols per second as currently defined in clause 6.1.1. Once the DHSR mode is entered, transmission occurs continuously as per the duplex mode.

C.2 Signals and modulation (pertains to clause 6)

C.2.1 Description of signals (modifies clause 6.1)

Four transmission modes, Duplex 1/2 symbol rate (DHSR), TTR synchronized (TTRS), duplex and half-duplex, are defined for use within this Recommendation. The two transmission modes, DHSR and TTRS are defined for use within Annex C. The transmission mode supported is a function of carrier set and is specified in Table C.1.

Frequencies other than those specified in Table C.1 and Table 3 shall not be transmitted simultaneously with ITU-T G.994.1 signals.

Two new signals C-SYNC1 and R-SYNC1 are specified as follows:

C-SYNC1: Unmodulated carriers that are synchronized with TTR_C as shown in Figure C.1. Energy shall be transmitted during all shaded time slots (DMT symbols). Phase reversals shall be applied to subcarrier 12 of carrier set C43 between the 2nd and 3rd FEXT DMT symbols of subframe rows 3, 6, 11 and 18. Silence shall be transmitted in all unshaded time slots (DMT symbols). The start of signal shall be aligned with a TTR hyperframe.

R-SYNC1: Unmodulated carriers that are synchronized with TTR_R as shown in Figure C.2. Energy shall be transmitted during all shaded time slots (DMT symbols). Phase reversals shall be applied to subcarrier 9 of carrier set C43 between the 2nd and 3rd FEXT DMT symbols of subframe rows 5, 9, 15 and 23. Silence shall be transmitted in all unshaded time slots (DMT symbols). The start of signal shall be aligned with a TTR hyperframe.

The tolerance of the symbol rate and carrier frequencies for an HSTU-C shall be ±50 ppm. The tolerance of the symbol rate and carrier frequencies for an HSTU-R shall be ±200 ppm during R-TONES-REQ and ±50 ppm during and after R-SYNC1. The HSTU-R may perform partial or full loop timing acquisition during the silence period preceding R-SYNC1. For both the HSTU-C and HSTU-R transmitter, the symbol rate and carrier frequencies shall be time locked.

C.2.1.1 Signalling family (replaces clause 6.1.1)

Carrier frequencies within this signalling family are given by N × 4.3125 kHz, where N is a positive integer. The symbol rate shall be 4312.5*32/345 ≡ 400 symbols per second when using the TTRS modulation and the symbol rate shall be 4312.5/16 ≡ 269.53125 symbols per second when using the DHSR modulation.

Within this family, there are four upstream carrier sets, designated A43, B43, C43 and J43. Each upstream carrier set has an associated downstream carrier set that carries the same designation. The carrier set frequencies and the maximum transmit power level per carrier for each carrier set are defined in Table C.1 where frequency = N × 4.3125 kHz.

The carrier sets in this family are mandatory for the xDSL modes listed in Table C.2. One or more carriers listed in Table C.1 may be transmitted in addition to the mandatory carrier set listed in Table C.2. Carriers not listed in Table C.1 or Table 3 shall not be transmitted.

Table C.1 – Carrier sets for the 4.3125 kHz signalling family

Carrier set designation	Upstream carrier sets		downstream carrier sets		Transmission mode
	Frequency indices (N)	Maximum power level/carrier (dBm)	Frequency indices (N)	Maximum power level/carrier (dBm)	
A43	9 17 25	–1.65	40 56 64	–3.65	Duplex only
B43	37 45 53	–1.65	72 88 96	–3.65	Duplex only
C43(Note)	7 9	–1.65	12 14 64 (Note)	–3.65	TTRS or DHRS
J43	9 17 25	–1.65	72 88 96	–3.65	Duplex only
NOTE – For the TTRS mode only, a pilot tone using subcarrier 16, modulated by data pattern {0,0}, generating the (+,+) constellation point is transmitted during $FEXT_R$ periods in conjunction with the modulated carriers.					

Table C.2 – Mandatory carrier sets

xDSL Recommendation(s)	Carrier set designation
ITU-T G.992.1 – Annex A, ITU-T G.992.2 – Annex A/B, ITU-T G.992.3 – Annex A/I, ITU-T G.992.4 – Annex A/B	A43
ITU-T G.992.1 – Annex B, ITU-T G.992.3 – Annex B	B43
ITU-T G.992.1 – Annex C, ITU-T G.992.2 – Annex C, ITU-T G.992.1 – Annex H, [and subsequent annexes for use in TCM-ISDN environment]	C43
ITU-T G.992.3 – Annex J	J43

C.2.2 Modulation (replaces clause 6.2)

All messages in Annex C are sent with the C43 carrier set. All carrier frequencies within the carrier set are simultaneously modulated with the same data bits using differentially encoded binary phase shift keying (DPSK). The transmit point is rotated 180° from the previous point if the transmit bit is a 1, and the transmit point is rotated 0° from the previous point if the transmit bit is a 0. When using

the TTRS modulation, the modulation shall be synchronized with TTR_C and TTR_R respectively. Energy shall only be transmitted during all shaded time slots (DMT symbols) as shown in Figure C.1 for downstream and Figure C.2 for upstream. Silence shall be transmitted in all unshaded time slots (DMT symbols).

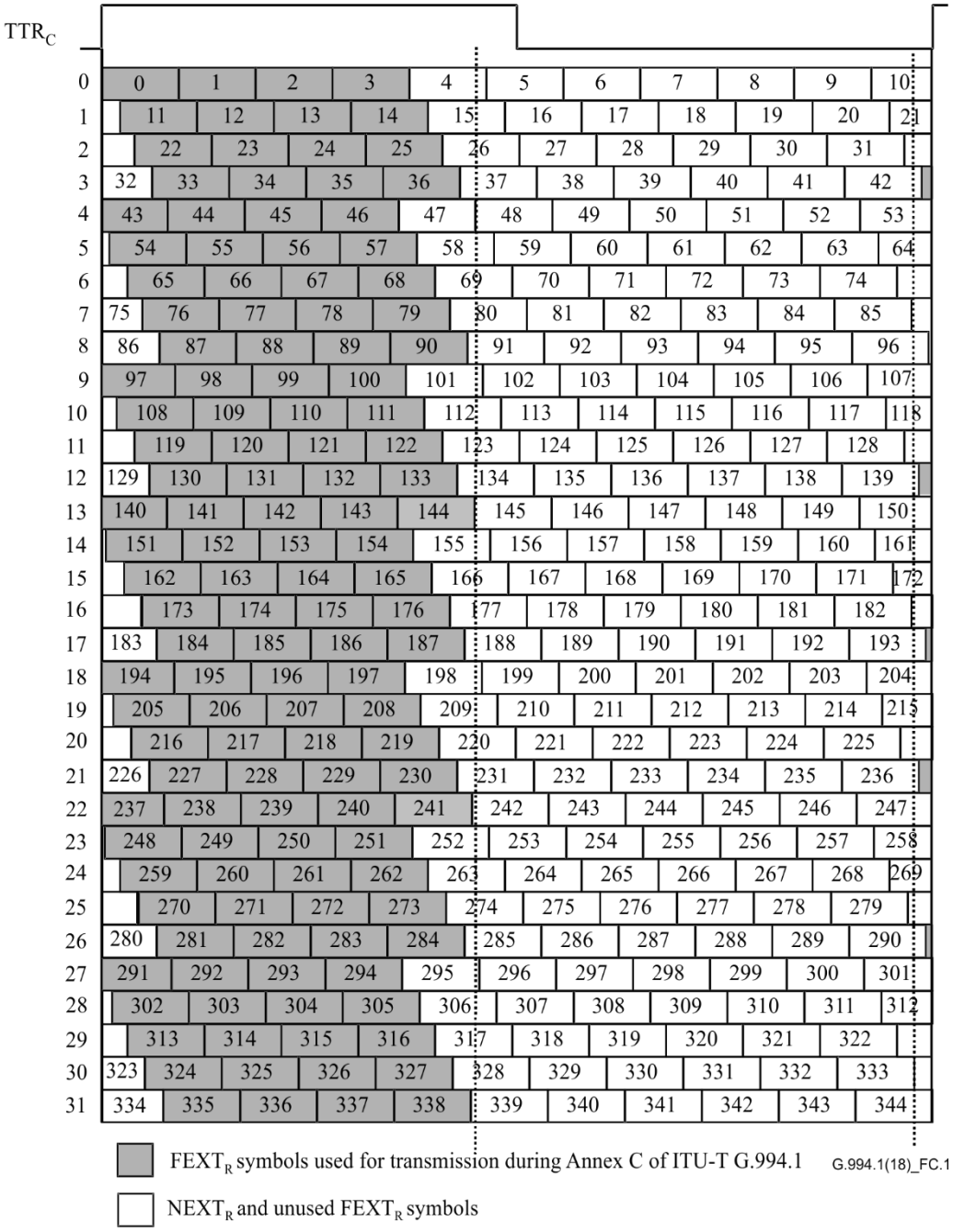


Figure C.1 – Symbol pattern in a hyperframe – Downstream (from Figure C.15 of [ITU-T G.992.1])

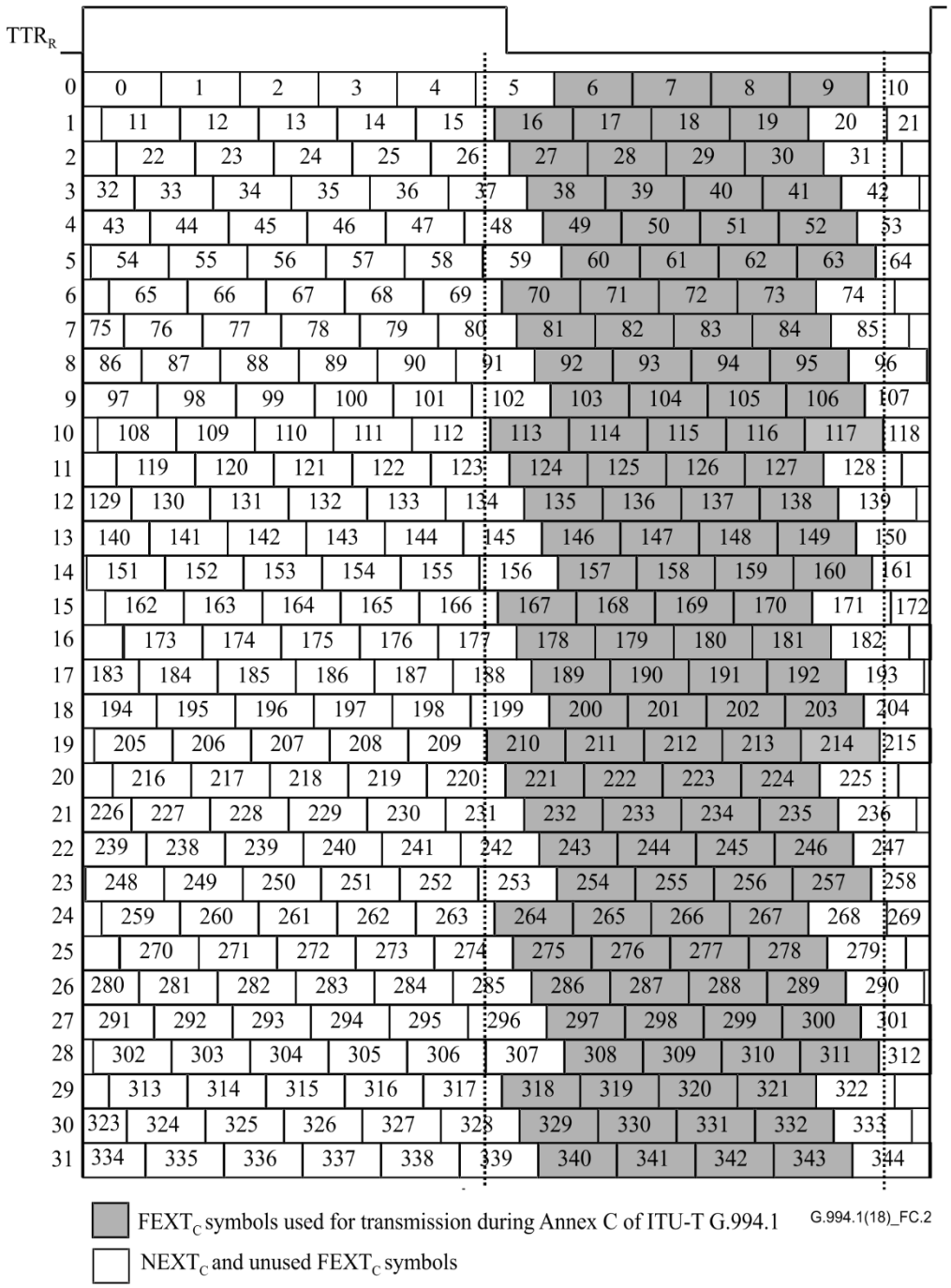


Figure C.2 – Symbol pattern in a hyperframe – Upstream (from Figure C.16 of [ITU-T G.992.1])

C.3 Start-up/cleardown procedures (pertains to clause 11)

C.3.1 Start-up procedures (new)

C.3.1.1 HSTU-R initiated start-up procedure (new)

Figure C.3 displays the timing for the HSTU-R initiated start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence, and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-R shall initiate the start-up procedure by transmitting signals from the C43 carrier set, with phase reversals every 16 ms (R-TONES-REQ). When this has been detected by the HSTU-C, the HSTU-C shall respond by transmitting the C-SYNC1 signal synchronized with the beginning of a TTR hyperframe. When this has been detected by the HSTU-R, the HSTU-R shall transmit silence (R-SILENT1) for 160 to 500 ms and shall then transmit signals from only one signalling family

(R-SYNC1). The minimum detection time for C-SYNC1 shall be 160 ms. When the HSTU-C has detected R-SYNC1, it shall respond by transmitting Galfs on modulated carriers (C-GALF1). If the HSTU-C wishes to use duplex 1/2 symbol rate (DHSR) mode, it shall transmit C-GALF using the DHSR modulation continuously as per the duplex mode. If the HSTU-C wishes to use TTR synchronized (TTRS) mode, it shall transmit C-GALF1 using the TTRS modulation. For the TTRS mode only, a pilot tone using subcarrier 16, modulated by data pattern {0,0}, generating the (+,+) constellation point shall also be transmitted beginning with C-GALF1. The HSTU-C shall maintain the selected modulation throughout the subsequent handshake procedure. When the HSTU-R has detected Galfs, it shall respond by transmitting flags on modulated carriers (R-FLAG1). The HSTU-R shall transmit R-FLAG1 and subsequent messages using the same modulation as the HSTU-C transmitted during C-GALF1. When the HSTU-C has detected flags, it shall respond by transmitting flags (C-FLAG1). When the HSTU-R has detected flags, it shall begin the first transaction.

Figure C.3 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-SYNC1) to the transmission of the next signal (e.g., C-GALF1).

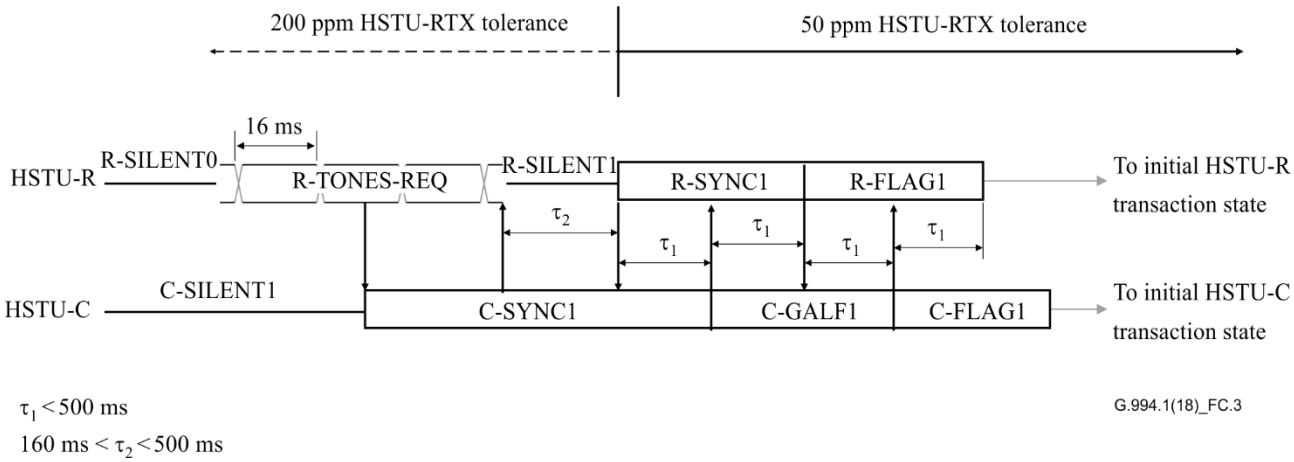


Figure C.3 – HSTU-R initiated start-up procedure

C.3.1.2 HSTU-C initiated start-up procedure (new)

Figure C.4 displays the timing for the HSTU-C initiated start-up procedure. Initially, the HSTU-R is in state R-SILENT0 transmitting silence, and the HSTU-C is in state C-SILENT1 transmitting silence. The HSTU-C shall initiate the start-up procedure by transmitting the C-SYNC1 signal synchronized with the beginning of a TTR hyper-frame. When this has been detected by the HSTU-R, the HSTU-R shall respond by transmitting signal (R-SYNC1). The minimum detection time for C-SYNC1 shall be 160 ms. When the HSTU-C has detected R-SYNC1, it shall respond by transmitting Galfs on modulated carriers (C-GALF1). If the HSTU-C wishes to use Duplex 1/2 symbol rate (DHSR) mode, it shall transmit C-GALF using the DHSR modulation continuously as per the duplex mode. If the HSTU-C wishes to use TTR synchronized (TTRS) mode, it shall transmit C-GALF1 using the TTRS modulation. For the TTRS mode only, a pilot tone using subcarrier 16, modulated by data pattern {0,0}, generating the (+,+) constellation point shall also be transmitted beginning with C-GALF1. The HSTU-C shall maintain the selected modulation throughout the subsequent handshake procedure. When the HSTU-R has detected Galfs, it shall respond by transmitting flags on modulated carriers (R-FLAG1). The HSTU-R shall transmit R-FLAG1 and subsequent messages using the same modulation as the HSTU-C transmitted during C-GALF1. When the HSTU-C has detected flags, it shall respond by transmitting flags (C-FLAG1). When the HSTU-R has detected flags, it shall begin the first transaction.

Figure C.4 shows the timing requirements between events that shall be adhered to. τ_1 is the time period from detection of a signal (e.g., R-SYNC1) to the transmission of the next signal (e.g., C-GALF1).

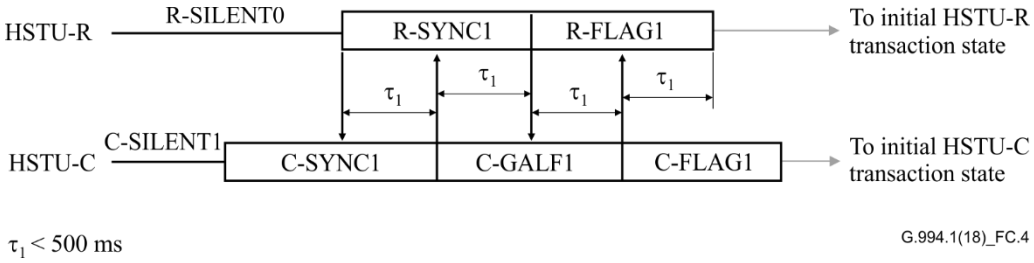


Figure C.4 – HSTU-C initiated duplex start-up procedure

C.3.2 Interoperability procedure (new)

If an HSTU-R does not respond to C-SYNC1, the HSTU-C shall alternately attempt C-TONES initialization as follows:

– transmit C-SYNC1 for 2 s;

– transmit silence for 100 ms;

– transmit C-TONES for 2 s;

– transmit silence for 100 ms;

– repeat above (starting with C-SYNC1).

Annex D

Collision control protocol for point-to-multipoint (P2MP) operation

(This annex forms an integral part of this Recommendation.)

D.1 Scope

This annex describes a protocol that is necessary to facilitate the ITU-T G.994.1 procedure in point-to-multi-point (P2MP) operation. In the P2MP case several HSTU-Rs are connected to the same HSTU-C, while each HSTU-R may intend to initiate an ITU-T G.994.1 procedure with the HSTU-C at any time. The defined collision control protocol allows only one HSTU-R to start the ITU-T G.994.1 procedure at a time, while others are delayed to avoid interference between HSTU-Rs intended to start simultaneously.

The procedure defined in this annex is backwards compatible with the regular (point-to-point) ITU-T G.994.1 procedure: if either HSTU-C or HSTU-R do not support this annex, the pair falls back to a regular ITU-T G.994.1 procedure.

D.2 Definitions

D.2.1 collision: A scenario where two or more HSTU-Rs connected to the same HSTU-C transmit signals of an ITU-T G.994.1 procedure simultaneously and, thus, interfere with each other in the attempt to establish an ITU-T G.994.1 session with the HSTU-C.

D.2.2 collision control: A procedure that prevents collision by allowing, at a time, only one from multiple HSTU-Rs connected to the HSTU-C to start an ITU-T G.994.1 procedure.

D.2.3 point-to-point (P2P) operation: A scenario where only one HSTU-R can be connected to an HSTU-C. The regular ITU-T G.994.1 procedure defined in clause 11 is intended for P2P operation only.

D.2.4 point-to-multipoint (P2MP) operation: A scenario where more than one HSTU-R can be connected to the same HSTU-C. The regular ITU-T G.994.1 procedure defined in clause 11 can be used only after the successful completion of a collision control session defined in this annex.

D.3 Abbreviations and acronyms

CCS Collision Control Session

NT Network Terminal

P2P Point-to-point

P2MP Point-to-Multipoint

D.4 Overview

The following two cases are addressed by the collision control protocol:

– Case 1: all the HSTU-Rs are connected to the HSTU-C by the same physical wiring and thus "hear" each other, i.e., when one HSTU-R transmits, all others can detect this transmission;

– Case 2: the HSTU-Rs are connected to the HSTU-C via different wires that are electrically isolated from one another, and thus HSTU-Rs cannot detect each other's transmissions (while all HSTU-Rs can detect transmission from the HSTU-C they are connected to).

NOTE – Case 1 mainly relates to the deployment in which multiple NTs are used in the same customer premises and, thus, are connected to the same wire. Case 2 relates to the deployment with multi-subscriber connections, in which each network terminal (NT) belongs to an independent subscriber and is connected via its individual line.

D.5 Collision control session

The collision control session (CCS) shall be performed by the HSTUs supporting P2MP operation prior to the regular ITU-T G.994.1 protocol defined in clause 11.1. During the CCS, the initiating HSTUs implement the collision control protocol.

The CCS includes the following steps at the HSTU-R side:

1) Each HSTU-R tries to detect an active ITU-T G.994.1 session (including CCS) on the line. If an ITU-T G.994.1 session is detected, the HSTU-R continues to monitor the line and waits when this session ends (i.e., when the medium becomes free).

2) If no ITU-T G.994.1 session is detected during at least T_{C1} (see clause D.5.1), the HSTU-R considers that the medium is free and starts a CCS by sending a Collision Control Flag (R-CC-FLAG), which starts with the transmission of the P2MP request signal, R-P2MP-REQ. The R-CC-FLAG includes an identification pattern (ID-pattern). The ID-pattern may be either selected by each HSTU-R autonomously (random pick) or assigned to the HSTU-R by the user or by other means that are beyond the scope of this Recommendation.

3) The HSTU-R, after sending the R-P2MP-REQ signal, tries to detect the corresponding response from the HSTU-C (the C-P2MP signal). If no C-P2MP signal is detected, the HSTU-R concludes that there is no P2MP capability at the HSTU-C side and starts a regular ITU-T G.994.1 handshake procedure seeking for P2P connection.

   NOTE 1 – To distinguish the CCS signals from the signals used by regular the ITU-T G.994.1 (i.e., P2P) procedure, the R-P2MP-REQ and C-P2MP signals use the M43MP tone set (M43tMP and M43cMP, see Table D.3) that are different from the M43 tone set used for G.9711 P2P initialization.

4) If other HSTU-Rs start transmitting at the same time and the HSTU-Rs can hear each other (Case 1, clause D.4), the collision will be resolved towards one of the HSTU-Rs, and this HSTU-R moves forward towards P2MP operation. The HSTU-Rs that lose the collision contest restart the CCS after a back off by a random time T_{BO} (see clause D.5.1). If HSTU-Rs are isolated from each other (Case 2, clause D.4), collision will not be resolved at this step as none of the HSTU-Rs that collided are aware of it, and all the HSTU-Rs will move to the next step of CCS.

   NOTE 2 – During transmission of R-CC-FLAG, the HSTU-Rs are not synchronized to each other, and detection of the flag is only by presence of the associated ITU-T G.994.1 signal power in the line.

5) If the C-P2MP signal is detected, the HSTU-R waits for the C-PTRN signal, which is a reply from the HSTU-C on the received R-CC-FLAG: if the HSTU-R receives back in the C-PTRN signal a reflection of its R-CC-FLAG, it starts a regular ITU-T G.994.1 procedure seeking for a P2MP connection with the HSTU-C. If no reflection is received, that means the HSTU-C either did not receive the R-CC-FLAG from this HSTU-R (due to potential collision) or replied to the R-CC-FLAG received from another HSTU-R (also competing for the medium, in Case 2); in either case the HSTU-R restarts the CCS after it backs off by a random time T_{BO}.

The flow diagram reflecting the described CCS mechanism for the HSTU-R is presented in Figure D.1.

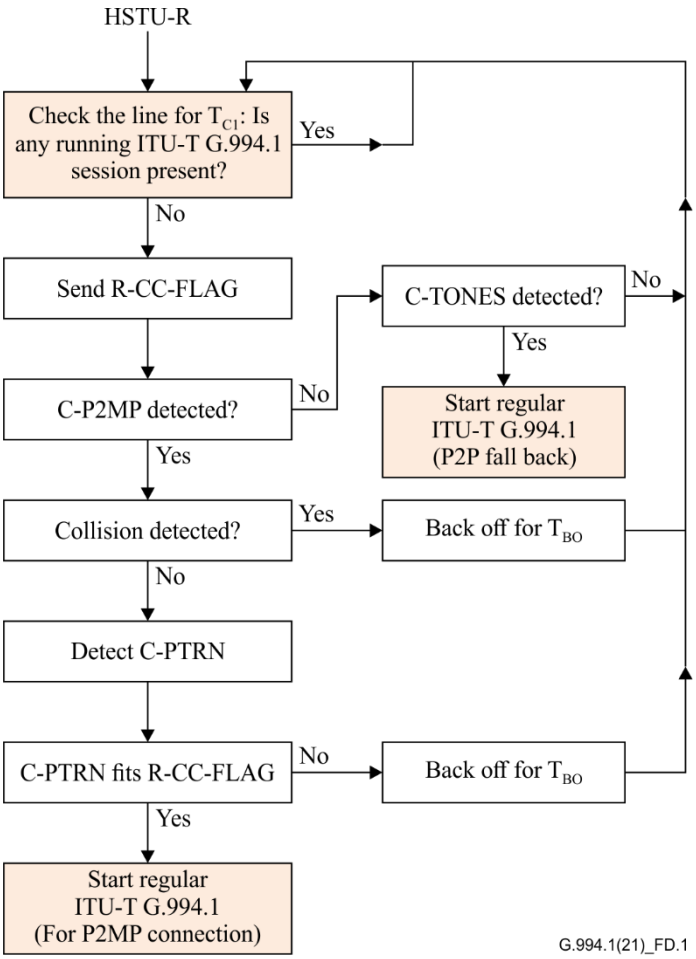


Figure D.1 – Flow diagram of HSTU-R operation

The "regular ITU-T G.994.1" shown in the flow diagram of Figure D.1, whether it is used for P2P or for P2MP, indicates the same regular HSTU-R initiated the ITU-T G.994.1 procedure that is defined in clause 11.1. However this same procedure runs on different tone sets: on M43 or other tone set for P2P connection (see Table 2) and on M43MP tone set for P2MP connection (see Table D.2).

NOTE 3 – To facilitate a P2P fallback, a P2MP HSTU-R transmits both M43 (and possibly other P2P tone sets) and M43MP tone sets, as described further and shown in Figure D.3.

NOTE 4 – The expected duration of the CCS shown in Figure D.1 is less than 1.5 seconds (with no back-offs involved).

If the HSTU-C does not support P2MP operation, it does not react on the CCS signals and starts the regular HSTU-R initiated G.994.1 procedure defined in clause 11.1 upon reception of R-TONES-REQ signal on frequencies of the M43 or other P2P tone set. If the HSTU-C does support P2MP operation, it supports the CCS by implementing the following steps:

1) The HSTU-C replies to the detected R-P2MP-REQ signal by sending the C-P2MP signal. If no R-P2MP-REQ signal is detected, HSTU-C continues searching for it or attempts to detect P2P request (R-TONES-REQ signal on a P2P tone set) if P2P mode is allowed (see clause D.5.3).

   NOTE 5 – An HSTU-C may not be allowed to start P2P procedure, e.g., in case a P2MP group is already formed. It may be also by a request from the operator (e.g., for testing purposes).

2) The HSTU-C detects the HSTU-R ID-pattern in the R-CC-FLAG and reflects it back to the HSTU-R by transmitting C-PTRN signal.

3) After transmission of C-PTRN signal, the HSTU-C waits to receive R-TONES-REQ signal on frequencies of the M43MP tone set and upon its reception starts a regular G.994.1 handshake defined in clause 11.1.

The flow diagram reflecting the described CCS mechanism for the HSTU-C is presented in Figure D.2.

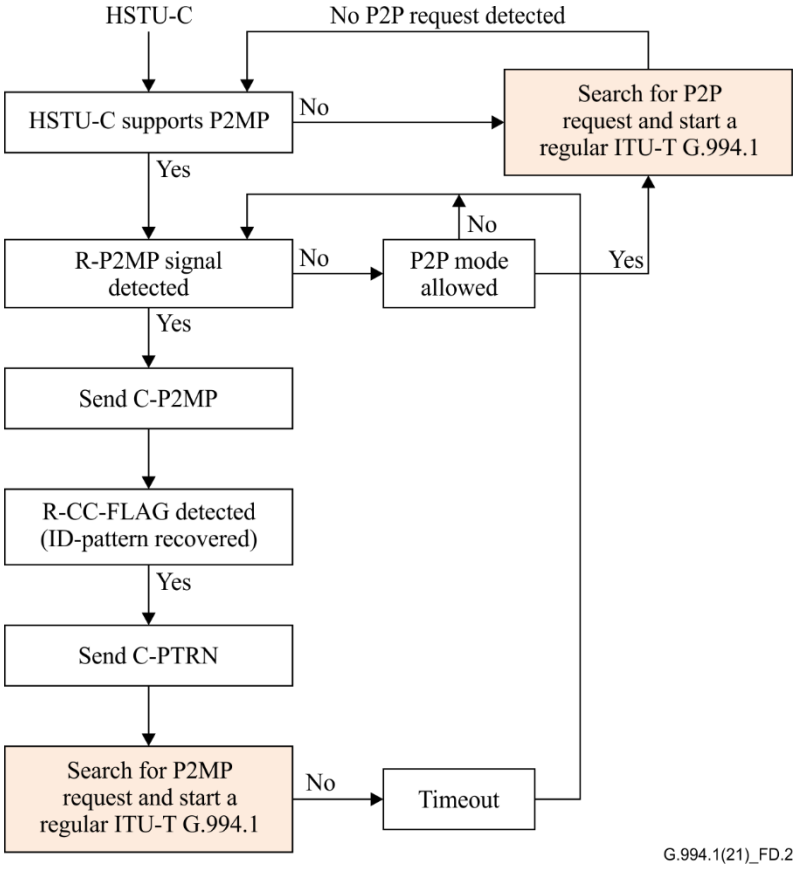


Figure D.2 – Flow diagram of HSTU-C operation

D.5.1 Collision resolution procedure at the HSTU-R

The flow diagram of the HSTU-R operation during CCS is presented in Figure D.1. This clause describes in detail all functional components of the flow diagram. In this description the term "M43MP tone set" is used to indicate a tone set defined in Table D.3 (e.g., M43tMP tone set or M43cMP tone set), while a term "P2P tone set" is used to indicate any M43 tone sets or any other tone sets defined in Table 2.

The collision procedure at the HSTU-R uses the following parameters:

– T_{C1} – the minimum time the medium should be free before CCS is allowed to start. Valid value: 500 ms.

– T_{BO} – back-off time for the HSTU-R, after HSTU-R loses the contention for CCS. Valid values are defined in clause D.5.1.4.

D.5.1.1 Checking the line for the presence of an ITU-T G.994.1 session

To detect the presence of ITU-T G.994.1 signals on the line, the joining HSTU-R shall listen to both the signals transmitted by the HSTU-C and the signals transmitted by the other HSTU-Rs.

The HSTU-R receiver shall monitor the medium on frequencies of the following tone sets:

– Tone sets transmitted by the HSTU-C, which are downstream M43MP or one of P2P (e.g., M43) sets;

– Tone sets transmitted by the HSTU-R (during CCS), which are upstream M43MP and one of P2P (e.g., M43) sets.

An HSTU-R shall be able to monitor on all the downstream and upstream frequencies of the P2MP and P2P tone sets .

NOTE – If monitoring of the medium is done by periodical sampling, a collision can be easily missed. A check for presence of downstream tones may be done first, and if none, an HSTU-R transitions to a continuous check for upstream M43MP and P2P tones, while checking from time to time for the presence of downstream tones.

If no ITU-T G.994.1 signals were detected during the time period T_{C1}, the HSTU-R considers no ITU-T G.994.1 session is present; otherwise it continues its search for free medium.

D.5.1.2 Sending the R-CC-FLAG

The R-CC-FLAG shall have the following structure:

– the R-P2MP-REQ signal, comprising a fixed number of consecutive active time slots starts the flag;

– the R-P2MP-REQ shall be followed by a number of consecutive silent time slots (R-F-SLT);

– the silent time R-F-SLT shall be followed by a corresponding number of consecutive active time slots, so that the sum of the number of R-F-SLT time slots and the number of active time slots following R-F-SLT is constant.

The number of silent slots, R-F-SLT, forms the ID-pattern of each particular HSTU-R. This ID-pattern should be unique for each HSTU-R of the P2MP group.

The total number of time slots in the R-CC-FLAG is 16. The duration of a single time slot is 50 ms. The details are described in Table D.1.

Table D.1 – Duration of the R-CC-FLAG components

R-CC-FLAG components	Number of time slots (Note 1)
R-P2MP-REQ	5
R-F-SLT (ID_slots)	1-10 (Note 2)
Active slots at the end of the flag	11 – ID_slots
NOTE 1 – The sum of all three components shall always be 16. NOTE 2 – Selection of ID pattern (the number of R-F-SLT slots) used by a particular HSTU-R is beyond the scope of the Recommendation.	

The structure of the R-P2MP-REQ signal and the active time slots at the end of the R-CC-FLAG are defined in clause D.6.2.

Simultaneously with R-CC-FLAG, the HSTU-R may also send a regular ITU-T G.994.1 R-TONE-REQ signal using any of P2P tones sets for cases when HSTU-C does not support P2MP operation or does not support ITU-T G.9711 (see clause D.5.3).

D.5.1.3 Detection of C-P2MP

By detecting the C-P2MP signal, the HSTU-R checks whether the HSTU-C supports P2MP operation or not. That's because the HSTU-C supporting P2MP operation replies with a C-P2MP signal as it receives R-P2MP-REQ signal, and this reply is transmitted at least 50 ms after the HSTU-R starts transmission of the R-P2MP-REQ signal (see clause D.5.2.3).

If during the first 50 ms of R-P2MP-REQ transmission no downstream signal appears on the line and the HSTU-R detects C-P2MP signal at the end of R-P2MP-REQ transmission, it shall stop transmission of the R-TONES-REQ signal (if applied) and shall continue the CCS. If a downstream signal is detected during the first 50 ms of R-P2MP-REQ transmission, the HSTU-R shall back off.

NOTE 1 – This 50 ms delay is to avoid confusion for the joining HSTU-R in multi-subscriber connection (see Case 2 of clause D.4) which eventually starts transmission of R-P2MP-REQ at the same time as the MTU-O starts transmission of C-P2MP in response to another HSTU-R from the P2MP group that started joining earlier. With the requirement to have a 50 ms no C-P2MP detected, the new joining HSTU-R will back-off.

If an HSTU-R detects no C-P2MP at the end of R-P2MP-REQ signal but detects it at the end of R-CC-FLAG, this HSTU-R shall immediately transmit the second R-CC-FLAG. If the HSTU-R detects again the C-P2MP signal at the end of the R-P2MP-REQ part of the second R-CC-FLAG, it shall stop the transmission of R-TONES-REQ (if applied) and shall continue the CCS.

NOTE 2 – No presence of C-P2MP after transmission of R-P2MP-REQ signal while it appears at the end of the R-CC-FLAG may happen if the HSTU-C turns on during the R-F-SLT period. The latter results in wrong R-F-SLT estimation and failure of the procedure.

If the HSTU-R that transmitted the R-CC-FLAG does not detect the C-P2MP signal upon completion of sending R-CC-FLAG, the HSTU-R shall try to detect a C-TONES signal (on M43 or on any other P2P tone set). If a C_TONES signal is detected, the HSRU-R shall conclude that the HSTU-C does not support P2MP and will continue with a regular ITU-T G.994.1 procedure using the detected P2P tone set (a P2P fallback).

If neither a C-P2MP signal nor a C-TONES signal is detected upon completion of the first R-CC-FLAG, the HSTU-R shall immediately transmit the second R-CC-FLAG. If the HSTU-R detects a C-P2MP signal at the end of the R-P2MP request of the second R-CC-FLAG, it shall stop transmitting the R-TONES-REQ (if applied) and shall continue the CCS. If C-P2MP is not detected, the HSTU-R shall try to detect the presence of C-TONES at the end of the second R-CC-FLAG. If C-TONES is detected, the HSTU-R shall continue with a regular ITU-T G.994.1 procedure using the detected P2P tone set (a P2P fallback).

If neither a C-P2MP signal nor a C-TONES signal is detected at the end of the second R-CC-FLAG, the HSTU-R shall restart the CCS.

NOTE 3 – No detection of C-TONES at the end of the first R-CC-FLAG can be because a legacy (P2P) HSTU-C may become active once in two seconds for a particular line only on rather short periods (see Annex A).

NOTE 4 – No detection of both C-P2MP and C-TONES at the end of the R-CC-FLAG can be because HSTU-C did not receive neither a R-P2MP-REQ nor a R-TONES-REQ signal, which can be due to a severe problem on the line or HSTU-C inactivity.

D.5.1.4 Collision detection

Each P2MP HSTU-R shall monitor the activity on M43MP tones during its number of silent slots R-F-SLT of R-CC-FLAG. If activity is detected in any of the R-F-SLT slots, the HSTU-R shall restart the CCS after a back off for a T_{BO} time (to avoid collision).

The value of T_{BO} shall be set to $T_{BO} = m \times \Delta T$, where ΔT=50 ms and m shall be randomly picked by the HSTU-R in the range between 1 and 16.

D.5.1.5 Detection of the C-PTRN

If no collision was detected, the HSTU-R shall complete transmission of the R-CC-FLAG, and follow with transmission of the R-P2MP-TONES signal after a time break R-SLT-1 = 100 ms. During transmission of R-P2MP-TONES, the HSTU-R shall attempt to obtain byte synchronization with the HSTU-C by receiving the C-GALF signal and detecting its own unique ID-pattern (that equals to the number of slots in R-F-SLT) that is reflected by the HSTU-C in the C-PTRN signal. If the pattern received in the C-PTRN signal fits the unique number of R-F-SLT slots in the R-CC-FLAG sent by the HSTU-R, the HSTU-R shall continue P2MP initialization using the regular ITU-T G.994.1 procedure over M43MP tone set.

If no C-PTRN signal is received or the pattern in the received C-PTRN signal does not fit the value of R-F-SLT in the R-CC-FLAG of the HSTU-R, the HSTU-R shall stop transmission of

R-P2MP-TONES and restart the CCS after a back off by time T_{BO}. An interruption of R-P2MP-TONES indicates to the HSTU-C that the HSTU-R dropped off.

The structure and content of the R-P2MP-TONES signal shall be as defined in clause D.6.2.

D.5.2 Collision control procedure at HSTU-C

The flow diagram of the HSTU-C operation during CCS is presented in Figure D.2. This clause describes in detail all functional components of the flow diagram. In this description the term "M43MP" is used to indicate either the M43tMP tone set or the M43cMP tone set, depending on the applied medium (twisted pair or coaxial cable). Further, a term "P2P tone set" is used to indicate any M43 tone sets or any other P2P tone sets defined in Table 2.

The collision procedure at the HSTU-C uses the following parameters:

– T_{FB} – P2P fallback timeout. Valid value is 550 milliseconds.

– T_W – R-TONES-REQ waiting timeout, as defined in clause D.5.2.5.

D.5.2.1 HSTU-C support of P2MP

If the HSTU-C supports P2MP and P2MP operation is enabled (see clause D.7.1), it shall permanently monitor the presence of both M43MP tones and P2P tone sets.

If the HSTU-C does not support P2MP or P2MP operation is disabled, the HSTU-C monitors only P2P tone sets. When it receives R-TONES-REQ signal on one or multiple P2P tone sets, the HSTU-C starts the regular ITU-T G.994.1 procedure using the relevant P2P tone set.

D.5.2.2 Detection of R-P2MP-REQ

If the HSTU-C with P2MP operation enabled detects no R-P2MP-REQ signal (on M43MP tone set) during T_{FB} while it detects R-TONES-REQ signal on one or multiple P2P tone sets, it concludes that joining the HSTU-R has no P2MP capability (the 'No' arrow in the Figure D.2 corresponds to no M43MP tones detected, while tones of P2P tone set(s) are detected). If R-P2M-REQ signal is detected during T_{FB} time period, the HSTU-C continues the CCS towards P2MP operation.

If the joining HSTU-R is detected with no P2MP capability, and P2P operation is allowed (see clause D.7.1), the HSTU-C falls back to P2P operation (see Figure D.2). If P2P operation is not allowed, the HSTU-C rejects the joining HSTU-R and continues searching for the R-P2MP-REQ signal.

D.5.2.3 Sending of C-P2MP

When the HSTU-C detects an R-P2MP-REQ signal, it shall send a C-P2MP signal as soon as possible, but not sooner than 50 ms after the actual start of the R-P2MP-REQ signal.

NOTE – The typical detection time of R-P2MP-REQ is not expected to exceed 50 ms.

The duration of C-P2MP shall be bigger than the duration of R-CC-FLAG (see Figure D.3). The structure and content of the C-P2MP signal is defined in clause D.6.3.

D.5.2.4 Detection of R-CC-FLAG

The HSTU-C shall detect the number of silent slots during R-F-SLT of the R-CC-FLAG and the completion of the flag (the start of the R-F-SLT is at the end of R-P2MP-REQ signal, and the end of R-F-SLT is at the start of active slots at the end of the R-CC-FLAG).

Whether a valid R-CC-FLAG is detected or not during C-P2MP transmission, the HSTU-C shall continue transmission of the C-P2MP after completion of the R-CC-FLAG, attempting to detect the R-P2MP-TONES signal. This signal indicates that the HSTU-R is still engaged and that the HSTU-R is ready to receive the C-PTRN signal. As the P-P2MP-TONES signal is detected, the HSTU-C shall send the C-GALF signal.

NOTE – The C-GALF signal facilitates byte synchronization at the HSTU-R, so the HSTU-R is ready to receive the C-PTRN signal.

The structure and content of C-P2MP and C-GALF signals is defined in clause D.6.3. The duration of C-GALF signal transmission is 90-135 ms (which is 6-9 GALF patterns).

D.5.2.5 Sending of C-PTRN

If a valid R-F-SLT value is detected, the HSTU-C shall reflect, i.e., send back to the HSTU-R(s), the detected R-F-SLT value expressed in time slots encoded in C-PTRN signal. During sending the C-PTRN signal, the HSTU-C shall receive the R-P2MP-TONES signal, indicating that the HSTU-R is engaged. After sending the C-PTRN signal with the detected (and valid) value of R-F-SLT, the HSTU-C shall be ready to receive the standard ITU-T G.994.1 R-TONES-REQ signal from the HSTU-R and proceed with a regular ITU-T G.994.1 handshake on M43MP tone set.

If no R-P2MP-TONES signal is received during transmission of the C-PTRN signal or no R-TONES-REQ signal is received after sending the C-PTRN signal during the timeout period T_W = 200 ms, the HSTU-C shall return to the beginning of the CCS.

If no valid R-F-SLT pattern is detected, the HSTU-C shall send a C-PTRN with a special value 0 and go back to the beginning of the CCS.

D.5.3 Operation options and timelines

In practical deployments, an HSTU-R supporting P2MP may be connected to an HSTU-C that does not support P2MP and vice versa. This clause specifies the means and the behaviour of a P2MP HSTU to support operation when connected to a P2P HSTU.

In the aim to support operation with a P2P HSTU-C, the HSTU-R supporting P2MP operation starts a regular ITU-T G.994.1 session using one or more P2P tone sets simultaneously with the CCS using the M43MP tone set.

The following three operation scenarios for P2MP HSTU may potentially appear.

Scenario 1: Both HSTUs support P2MP (P2MP operation)

The HSTU-R starts simultaneously a regular ITU-T G.994.1 session using one or more of P2P tone sets and a CCS using the M43MP tone set. If the HSTU-C detects signal on M43MP tones, it continues with the CCS, as described in clause D.5.2, and ignores signals on P2P tone sets from the HSTU-R. When the HSTU-R detects a C-P2MP signal, it abandons the regular ITU-T G.994.1 session, stops using the P2P tone sets and continues with the CCS.

The following two cases are possible under this scenario:

Case (a): The HSTU-R detects the P2MP signal right after R-P2MP-REQ part of the first R-CC-FLAG.

Case (b): The HSTU-R detects no C-P2MP after the R-P2MP-REQ part of the R-CC-FLAG, but does detect it at the end of the R-CC-FLAG. In this case the second R-CC-FLAG is transmitted.

The timing diagrams of case (a) and case (b) are shown in Figure D.3a and Figure D.3b, respectively. Both figures show cases when no collision has occurred.

Scenario 2: The HSTU-C supports P2MP, while the HSTU-R does not

The HSTU-R starts a regular ITU-T G.994.1 session using the one or more of P2P tone sets. The HSTU-C detects no M43MP tones, but detects P2P tones, and if P2P operation is allowed, it follows the regular ITU-T G.994.1 session using a P2P tone set, as described in clause D.5.2.1. If P2P operation is not allowed by the operator (see clause D.7.1), the HSTU-C ignores the ITU-T G.994.1 request and keep searching for M43MP tones.

Scenario 3: The HSTU-R supports P2MP while the HSTU-C does not

The HSTU-R starts simultaneously a regular ITU-T G.994.1 session using one or more of P2Ptone sets and a CCS using the M43MP tone set. The HSTU-C detects only P2P tones and continues with a regular ITU-T G.994.1 session using one of the P2P tone sets. Since the HSTU-R detects no C-P2MP signal, it abandons the CCS session and continues with a regular ITU-T G.994.1 procedure in P2P mode only using the selected P2P tone set, as described in clause D.5.1.3.

The following two cases are possible under this scenario:

Case (a): If the HSTU-C continuously monitors the transmission of an R-TONES-REQ signal, it will likely detect it during the R-P2MP-REQ transmission.

Case (b): If the HSTU-C checks the R-TONES-REQ signal in the line only during a short time, the second R-CC-FLAG may be used.

The timing diagrams of case (a) and case (b) are presented in Figure D.4a and Figure D.4b, respectively. Both figures show cases when no collision has occurred.

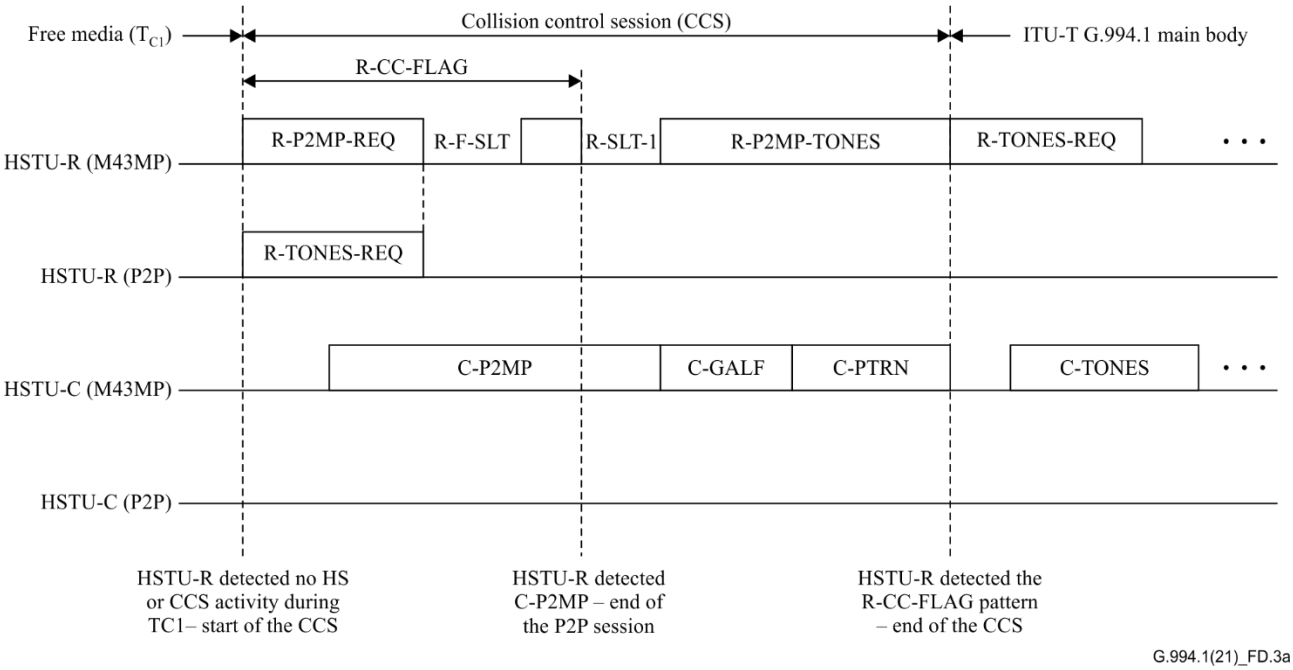


Figure D.3a – The timeline of signal exchange (M43MP and P2P tone sets) when P2MP HSTU-R is connected to a P2MP HSTU-C (Scenario 1 case a)

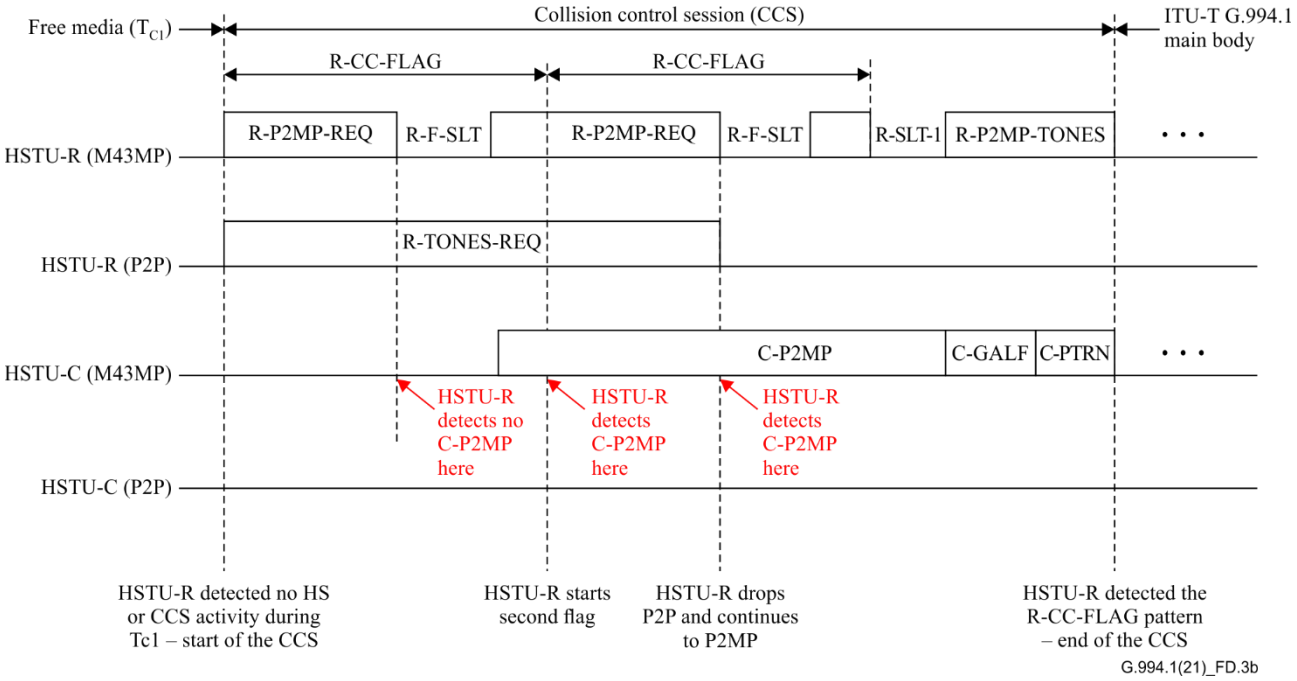


Figure D.3b – The timeline of signal exchange (M43MP and P2P tone sets) when P2MP HSTU-R is connected to a P2MP HSTU-C (Scenario 1 case b)

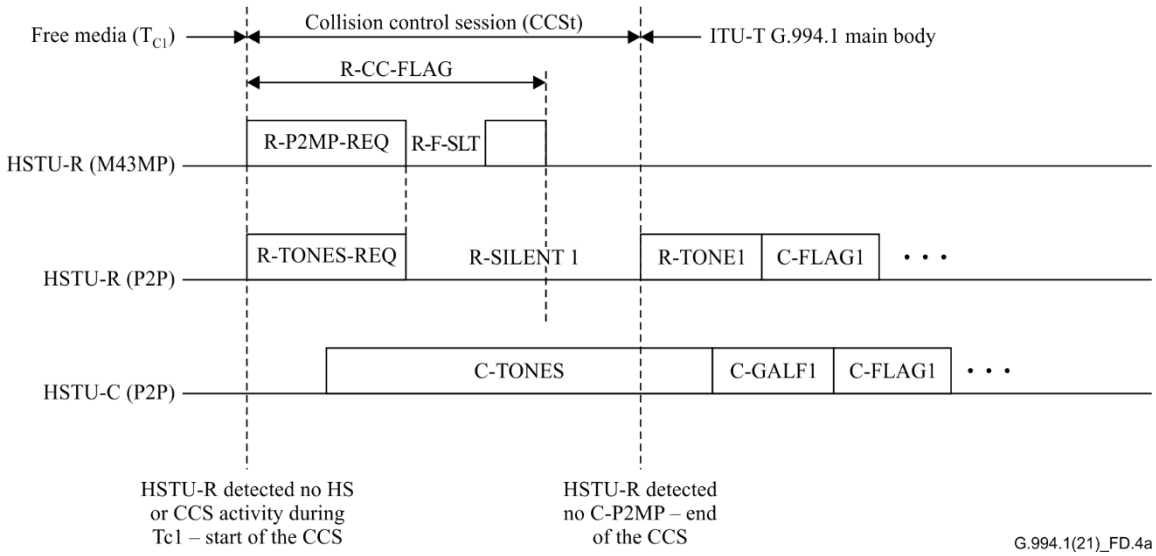


Figure D.4a – The timeline of signal exchange (M43MP and P2P tone sets) when P2MP HSTU-R is connected to HSTU-C with no P2MP support (Scenario 3 case a)

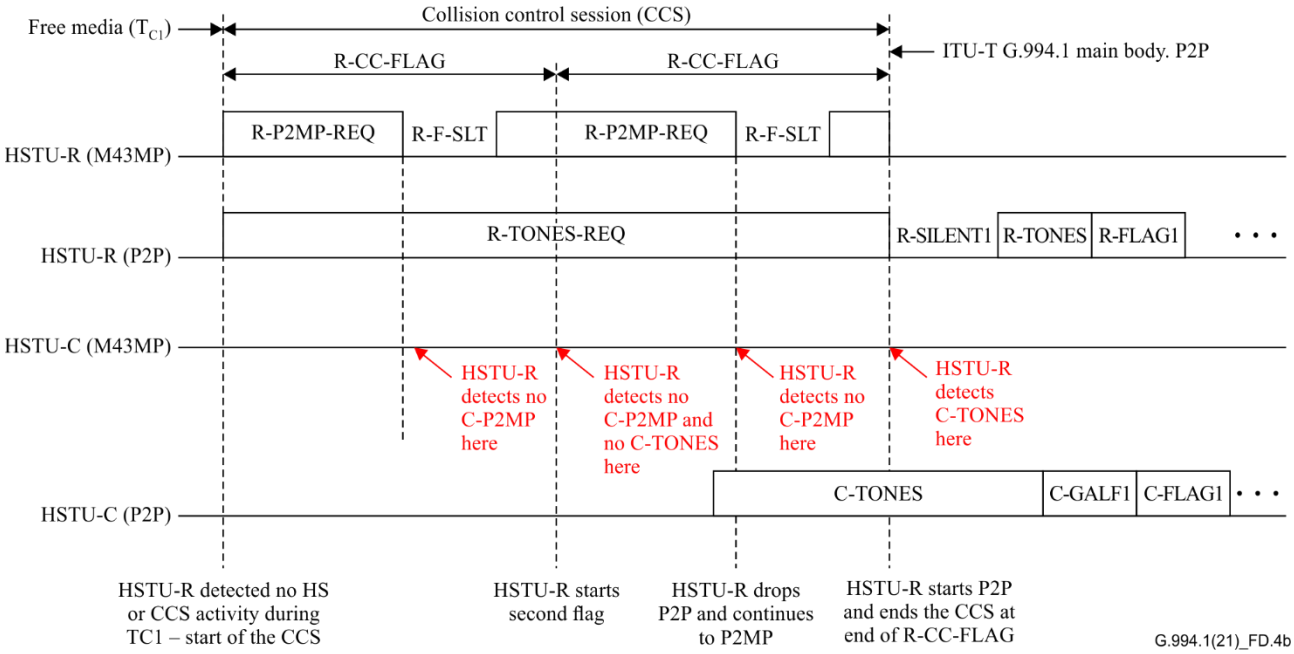


Figure D.4b – The timeline of signal exchange (M43MP and P2P tone sets) when P2MP HSTU-R is connected to HSTU-C with no P2MP support (Scenario 3 case b)

D.6 Signals for collision control protocol

D.6.1 Carrier frequencies specific to the collision control protocol

Additional carrier sets, M43tMP and M43cMP, are defined to support the collision control protocol. Those carrier sets belong to the 4.3125 kHz family (see clause 6.1.1).

The carrier set frequencies and the maximum transmit power level per carrier for each carrier set are defined in Table D.2, where frequency = N × 4.3125 kHz.

The support of those carrier sets is mandatory for the xDSL modes listed in Table D.3 when the collision control protocol is supported.

Table D.2 – Carrier sets for the 4.3125 kHz signalling family

Carrier set designation	Upstream carrier sets		Downstream carrier sets		Transmission mode
	Frequency indices (N)	Maximum power level/carrier (dBm)	Frequency indices (N)	Maximum power level/carrier (dBm)	
M43tMP (Note)	60; 108; 120	−11.65	240; 276; 312	−13.65	Duplex only
M43cMP	1200; 1212	−38.65	4680, 4728	−28.65	Duplex only
NOTE – In some jurisdictions, additional limitations on the maximum downstream power level and maximum upstream power level may apply.					

NOTE – To avoid overloading the MTU receiver of the same P2MP group, the maximum transmit power of M43tMP is reduced with respect to other carrier sets defined in Table 1 for P2P cases.

Table D.3 – Mandatory carrier sets

xDSL Recommendation(s)	Carrier set designation(s)
ITU-T G.9711 Annex P	M43tMP
ITU-T G.9711 Annex Q	M43cMP

D.6.2 The HSTU-R signals

The HSTU-R signals used during CCS shall have the following structure and content.

The R-CC-FLAG signal (R-P2MP-REQ and active slots at the end of R-CC-FLAG) shall have the same structure as R-TONES-REQ signal defined in clause 11.1.

The R-P2MP-TONES signal shall have the same structure as R-TONE 1 signal defined in clause 11.1.

The tolerance for carrier frequencies of R-CC-FLAG signal shall not exceed ±200 ppm.

The tolerance for carrier frequencies and symbol rate of R-P2MP-TONES signal shall not exceed ±50 ppm. The tolerance for carrier frequencies of R-TONES-REQ signal following the R-P2MP-TONES signal shall not exceed ±50 ppm.

D.6.3 The HSTU-C signals

The C-P2MP signal shall have the same structure as the C-TONES signal defined in clause 11.1.

The C-GALF signal shall have the same structure as the C-GALF1 signal defined in clause 11.1. and shall include 6-9 Galfs (pattern 1000|0001).

The C-PTRN signal shall include one information byte, representing the number of slots in R-F-SLT and encoded as unsigned integer, followed by a Galf pattern.

The tolerance of the symbol rate and carrier frequencies for an HSTU-C shall be ±50 ppm.

The HSTU-C may also transmit the defined signals applying a duty cycle that is synchronized with the ITU-T G.9711 PDX frame, such that signals are transmitted only on the first M_{ds} symbol positions of the current PDX frame, while the rest of the PDX frame has no transmission. Enabling the duty cycle can be described in time domain as:

$$C\text{-}OUT(t) = C\text{-}IN(t) \times PDXds(t)$$

where *C-IN(t)* is the original HSTU-C signal, *C-OUT(t)* is HSTU-C signal after duty cycle is applied, and *PDXds(t)* is a function that equals to 1 during the first M_{ds} symbol periods of the current PDX frame and to 0 during the rest of the current PDX frame.

D.7 Management

The operation of HSTU-C in P2MP mode and use of CCS is controlled by the following parameters:

– P2MP mode enabled (*P2MP_enabled*).

D.7.1 P2MP mode enabled (*P2MP_enabled*)

The control parameter *P2MP_enabled* determines whether the HSTU-C shall operate in P2MP mode, with or without fallback to P2P mode, or in P2P mode only. Valid values are:

– 0 (P2MP mode enabled and P2P fallback allowed),

– 1 (P2MP mode enabled and P2P fallback disallowed) and

– 2 (P2MP mode disabled).

If *P2MP_enabled* is set to 0, the HSTU-C shall operate in P2MP mode and is allowed to fall back into P2P operation if no signals associated with P2MP session are detected, while the HSTU-C detects signals associated with regular (P2P) ITU-T G.994.1 procedure.

If *P2MP_enabled* is set to 1, the HSTU-C shall operate in P2MP mode and is not allowed to fall back into P2P operation even if no signals associated with P2MP session are detected, and shall continue searching for P2MP signals.

If *P2MP_enabled* is set to 2, the HSTU-C shall operate in P2P mode only and disregard P2MP signals of any type.

This parameter is only relevant for HSTU-C that is capable of supporting P2MP.

The control parameter *P2MP_enabled* is equal to the DPU-MIB configuration parameter P2MP_ENABLED (see clause M.2.2).

Annexes E to L

Annexes E to L have intentionally been left blank.

Annex M

Managed objects

(This annex forms an integral part of this Recommendation.)

M.1 Scope

This annex specifies the physical layer management for HSTU systems. It specifies managed objects for configuration management. No managed objects are defined for state management.

M.2 Configuration objects

The ITU-T G.994.1 configuration managed objects are listed in Table M.1.

Table M.1 – Configuration objects

Category/object	Defined in clause:	Q interface
Downstream PSD configuration		
MAXHSPSDds	M.2.1	R/W (M)
P2MP configuration		
P2MP_ENABLED	M.2.1	R/W (M)

M.2.1 Downstream maximum PSD (MAXHSPSDds)

Description: Defines the maximum Power Spectral Density (PSD) level for a tone (identified by its frequency index) during the ITU-T G.994.1 phase, applicable at the U-O2 reference point.

Type: Array of HSMAXPSDdescriptor[0...N–1], with $1 \leq N \leq 21$ or an Empty Array (downstream maximum PSD defined in [ITU-T G.994.1]).

HSMAXPSDdescriptor

Type: Record of sub-carrier indices and associated maximum PSD levels.

Sub-carrier index:

Description: For each valid sub-carrier index not included in the MAXHSPSDds configuration, the maximum PSD level permitted by ITU-T G.994.1 (see clauses 6.1.1 and D.6.1) is allowed.

Type: 16-bit unsigned integer.

Valid values: 12, 14, 40, 56, 64, 72, 88, 96, 240, 257, 276 293, 312, 337, 383, 511, 4368, 4440, 4488, 4680, 4728.

PSD level:

Description: The maximum PSD level values from −40 to −98.5 dBm/Hz. Coded as 'psd-level', shall be calculated using the following formula:

psd-level = (maximum PSD level / −0.5) – 80

If the sub-carrier-index is 4368, 4440, 4488, 4680 or 4728, the maximum PSD level shall be less than or equal to −65 dBm/Hz corresponding to the configured maximum PSD level value, resulting in the range from 50 to 118.

Type: 8-bit unsigned integer.

Unit: −0.5 dBm/Hz.

Valid values: 0..117 (−40 to −98.5 dBm/Hz), 118 (special value – tone not transmitted).

Default value: Empty array (downstream maximum PSD defined in this Recommendation).

Reference: Clause 13.

M.2.2 P2MP mode enabled (P2MP_ENABLED)

Description: Defines whether the HSTU-C shall operate in P2MP mode (with fallback to P2P mode allowed or shall operate in P2MP mode with fallback to P2P mode disallowed (i.e., shall be persistent in trying to establish a P2MP connection instead of falling back to P2P) or shall disable P2MP and operate in P2P mode only (i.e., disregard P2MP signals of any type). This object is defined only if the HSTU-C supports P2MP operation.

Type: Enumeration

Unit: N/A

Valid values:

0 p2mp-enabled-p2p-fallback-allowed
1 p2mp-enabled-p2p-fallback-disallowed
2 p2mp-disabled

Default value: 0 (p2mp-enabled-p2p-fallback-allowed).

Reference: Clause D.7.1.

Appendix I

ITU-T G.994.1 sample sessions

(This appendix does not form an integral part of this Recommendation.)

Session	msg 1	msg 2	msg 3	msg 4	msg 5	msg 6	msg 7	msg 8
1	CLR	cl	ACK(1)	MS	ack(1)			
2	MS	ack(1)						
3	MS	req-mr	MR	ms	ACK(1)			
4	MS	req-clr	CLR	cl	ACK(1)	MS	ack(1)	
5	CLR	cl	ACK(1)	MR	ms	ACK(1)		
6	MR	ms	ACK(1)					
7	MR	req-ms	MS	ack(1)				
8	MR	req-clr	CLR	cl	ACK(1)	MR	ms	ACK(1)
NOTE – HSTU-R transmitted messages are shown in upper case, whilst HSTU-C transmitted messages are shown in lower case.								

In the case when an FCS indicates an errored frame, a REQ-RTX transaction may become part of a basic or enhanced transaction. Some examples are given below. An "*" next to a message indicates the message was received with an FCS error. The parenthetical after the REQ-RTX indicates the contents of the last correctly received message (LCRM) octet.

Session	msg1	msg2	msg3	msg4	msg5	msg6	msg7
9	CLR	cl	ACK(1)	MS *	req-rtx (ack(1))	MS	ack(1)
10	CLR	cl *	REQ-RTX (NULL)	nak-cd			
11	CLR_0	ack(2)	CLR_1	ack(2)	CLR_2 *	req-rtx (clr_1)	CLR_2
12	CLR	cl *	REQ-RTX (NULL) *	req-rtx (clr)	REQ-RTX (NULL)	nak-cd	
13	CLR	cl *	REQ-RTX (NULL) *	req-rtx (clr) *	REQ-RTX (NULL)	nak-cd	
14	MS	ack(1) *	REQ-RTX (NULL)	ack(1)			
15	CLR *	req-rtx(null) *	REQ-RTX (NULL)	nak-cd			

Appendix II

Provider code contact information

(This appendix does not form an integral part of this Recommendation.)

It is often difficult for implementers to find information about obtaining provider codes since they are regional and not specified in [ITU-T T.35]. This appendix contains information about obtaining provider codes.

Country	Relevant document	Contact telephone	Contact information
USA	T1.220	+1 732 699 5577	Telcordia Language Standards Department 444 Hoes Lane, Piscataway NJ 08854 USA
Japan	–	+81 3 3432 1551	TTC, 1-2-11, Hamamatsu-cho, Minato-ku, Tokyo 105-0013, JAPAN
Belgium	–	Tel. +32 2 226 88 99 Fax. +32 2 223 11 28	Belgian Institute of Postal Services and Telecommunications Avenue de l'Astronomie, 14 Boîte 21 1210 Brussels, BELGIUM

Appendix III

Support for legacy DMT-based devices

(This appendix does not form an integral part of this Recommendation.)

Systems that support interoperability with [b-ANSI T1.413] should perform the following functions at initialization:

– The HSTU-C should monitor for R-ACK-REQ (as defined in [b-ANSI T1.413]).

– The HSTU-R should monitor for C-ACT1, C-ACT2, C-ACT3, C-ACT4 and C-TONE (as defined in [b-ANSI T1.413]).

– The HSTU-R should alternately attempt initiating signals from this Recommendation and [b-ANSI T1.413] as follows:

  • transmit R-TONES-REQ for 2 s;
  • transmit silence for 100 ms;
  • transmit R-ACK-REQ for 2 s;
  • transmit silence for 100 ms;
  • repeat above (starting with R-TONES-REQ).

Upon detection of the above tones, the system that supports interoperability with [b-ANSI T1.413] should follow the procedures and functions described therein.

Appendix IV

Procedure for the assignment of additional ITU-T G.994.1 parameters

(This appendix does not form an integral part of this Recommendation.)

IV.1 Introduction

This appendix defines the procedure for requesting the assignment of ITU-T G.994.1 parameters that are indicated as being "reserved for allocation by ITU-T." This procedure is intended to allow for the expedient assignment of such parameters.

This procedure does not cover changes to the overall structure of this Recommendation.

IV.2 Procedure

An ITU-T working party or study group that identifies a need for the assignment of an ITU-T G.994.1 parameter is required to make that request to the Chairman of the study group with responsibility for this Recommendation with copies of the request to the editor of this Recommendation and the TSB counsellor for the study group concerned. After consultation with the editor of this Recommendation, the Chairman will either approve the request or provide an alternative solution to the request (if a change is necessary to achieve compliance with this Recommendation). Periodically, these allocated parameters will be included in the ITU-T G.994.1 implementor's guide, which will finally be merged into a subsequent version of this Recommendation.

It is expected that requests using this procedure will obtain a response within one month.

Appendix V

Rules for code point table numbering

(This appendix does not form an integral part of this Recommendation.)

This appendix defines the rules that apply to the assignment of table numbering in clause 9.3.4 (parameter field) and clause 9.4 (standard information field).

Digit position	**Used for**				
1 examples → rules→	**Npar(1)** Table x (x is even)	**Spar(1)** Table x (x is odd)			
2 examples → rules→	**Npar(1) extensions** Table x.1 (x is even)		**Npar(2)** Table x.y (x is odd) (y is odd)	**Spar(2)** Table x.y (x is odd) (y is even)	
3 examples → rules→		**Spar(1) extensions** Table x.y.1 (x is odd) (y ≡ 0)	**Npar(2) extensions** Table x.y.1 (x is odd) (y is odd)		**Npar(3)** Table x.y.1 (x is odd) (y is even)
4 examples → rules→				**Spar(2) extensions** Table x.y.z.1 (x is odd) (y is even) (z ≡ 0)	**Npar(3) extensions** Table x.y.1.1 (x is odd) (y is even)

Bibliography

[b-ANSI T1.413] ANSI T1.413 (1998), *Telecommunications – Network and Customer Installation Interfaces – Asymmetrical Digital Subscriber Line (ADSL) Metallic Interface*.

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