INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

V.42

Corrigendum 1
(07/2003)

SERIES V: DATA COMMUNICATION OVER THE TELEPHONE NETWORK

Error control

Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion

Corrigendum 1

ITU-T Recommendation V.42 (2002) – Corrigendum 1

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ITU-T Recommendation V.42

Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion

Corrigendum 1

Summary

Some errors have been found in ITU-T Rec. V.42. They are mainly of an editorial nature, although an extra note clarifies the information in Table 11a/V.42 which could have led to confusion.

Source

Corrigendum 1 to ITU-T Recommendation V.42 was approved by ITU-T Study Group 16 (2001-2004) under the ITU-T Recommendation A.8 procedure on 14 July 2003.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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 not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T Recommendation V.42

Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion

Corrigendum 1

1) Clause 7.2.1.1 Determination of role

Modify the last sentence as follows:

"... determined by parameterization (strapping options or other user indication of desired role to the control function). "

2) Table 5/V.42 – Receiving DCE actions on receipt of break from the remote DCE

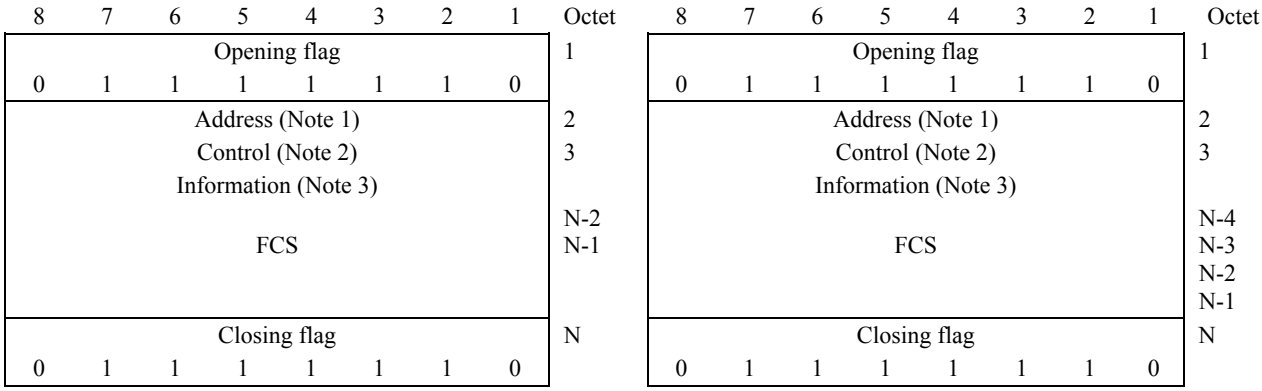
Modify Table 5 as follows:

Table 5/V.42 – Receiving DCE actions on receipt of break from the remote DCE

Break handling option	With respect to data	
	Going to remote DCE	Going to local DTE
Destructive/Expedited (Notes 1 and 2)	– Discard data not yet transmitted	– Discard data not yet delivered – Deliver break signal
Non-~~D~~destructive/Expedited	– No effect	– Deliver break signal immediately – Resume normal data delivery
Non-destructive/Non-expedited	– No effect	– Deliver break signal in sequence with respect to data
NOTE 1 – All state variables pertaining to control function and error control function operation, except those pertaining to break transfer, are reset to their initial values. NOTE 2 – For all break options, acknowledgement should be returned as soon as possible.		

3) Figure 4/V.42 – Frame structure

Modify Figure 4 as follows:



NOTE 1 – The maximum size of this field is limited to two octets.

NOTE 2 – The control field is two octets for frame types with sequence numbers and one octet for frame types without sequence numbers, see 8.2.2.

NOTE 3 – Not all frame types have an information field.

Figure 4/V.42 – Frame structure

4) Table 7/V.42 – Control field formats

Modify Table 7 as follows:

Table 7/V.42 – Control field formats

	Control field bits (modulo 128)								
Format	8	7	6	5	4	3	2	1	Octet
I format	N(S)							0	3
	N(R)							P	4
S format	X	X	X	X	S	S	0	1	3
	N(R)							P/F	4
U format	M	M	M	P/F	M	M	1	1	3

N(S) Transmitter send sequence number

N(R) Transmitter receive sequence number

S Supervisory function bits

M Modifier function bits

P/F Poll bit when issued as a command
Final bit when issued as a response

X Reserved and set to 0

5) Table 11a/V.42 – Parameter/procedures associated with the "parameter negotiation" subfield

Replace Note 1 in Table 11a as follows:

NOTE 1 – The length of this item is 4 octets (i.e. PL = 4). The bits in these octets constitute a 32-bit mask, each for a particular HDLC optional function. Bit 1 of this mask is the low-order bit of octet 1 and is transmitted first; bit 9 is the low-order bit of octet 2, etc. The bits corresponding to the optional procedures used within this Recommendation are as follows (in decimal):

- 3~~A~~ Selective retransmission procedure (SREJ frame) single I frame request;
- 14 Loop-back test procedure (TEST frame);
- 17 Extended FCS procedure (32-bit FCS);
- 24 Selective retransmission procedure (SREJ frame) multiple I frame request with span list capability.

A bit position set to 1 indicates request/agreement to use the procedure. A bit position set to 0 indicates no request/no agreement to use the procedure.

For conformance with the encoding rules in ISO/IEC 8885, the transmitter of an XID command frame shall set bit positions 2, 4, 8, 9, 12 and 16 to 1. The transmitter of an XID response frame shall also set these bit positions to 1, except bit position 16 shall be set to 0 if bit position 17 is set to 1. A receiver of these frames should ignore these bit positions. ISO/IEC 8885:1993 is a normative reference for V.42 and uses a PL value of three; implementors should note that V.42 devices may use either PL = 3 or PL = 4 and still be compliant with this Recommendation.

6) Clause VI.2 Skipping of originator/answerer detection patterns

Correct the Recommendation reference in the note as follows:

NOTE – Clause 9.3.1/~~V.9.2~~V.92 requires that both the originating and answering modems skip the V.42 detection phase if they both indicate that V.42 is supported in the V.8 protocol octet or in the V.92 short phase 1 signals.

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