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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.7041/Y.1303

Corrigendum 1
(01/2005)

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Corrigendum 1

ITU-T Recommendation G.7041/Y.1303 (2003) –
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ITU-T Recommendation G.7041/Y.1303

Generic framing procedure (GFP)

Corrigendum 1

Summary

This corrigendum corrects and clarifies text associated with mapping PPP/HDLC and MPLS clients into GFP-F frames.

Source

Corrigendum 1 to ITU-T Recommendation G.7041/Y.1303 (2003) was approved on 13 January 2005 by ITU-T Study Group 15 (2005-2008) under the ITU-T Recommendation A.8 procedure.

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.

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Generic framing procedure (GFP)

Corrigendum 1

1) Clause 6

Change the title of clause 6 to read:

6 Aspects common to both frame-mapped and transparent-mapped modes of GFP

2) Clause 7.2

Modify clause 7.2 as follows:

7.2 HDLC/PPP payload

The direct mapping of HDLC/PPP into GFP is intended for applications that wish to transport HDLC/PPP frames in their native mode. HDLC/PPP payloads are natively encapsulated into an HDLC-like frame. ~~IP/PPP payloads are first encapsulated in an HDLC-like frame.~~ The format of a PPP frame is defined in IETF RFC 1661, section 2. The format of the HDLC-like frame is defined in IETF RFC 1662, section 3. Unlike RFC 1662, no octet stuffing procedure is performed to identify on flag or control escape characters during the GFP adaptation process. There is a one-to-one mapping between a higher-layer PPP/HDLC PDU and a GFP PDU. Specifically, the boundaries of the GFP PDU are aligned with boundaries of the framed higher layer HDLC/PPP ~~PPP/HDLC~~ PDUs. This relationship between the HDLC/PPP ~~PPP/HDLC~~ frame and the GFP frame is illustrated in Figure 7-2.

Similar clients, such as MAPOS, are mapped in the same manner as PPP frames.

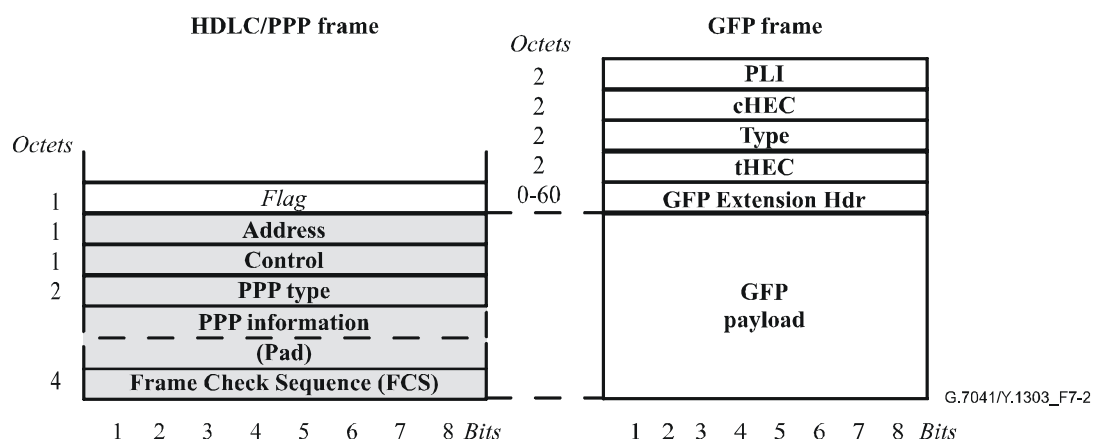


Figure 7-2/G.7041/Y.1303 – HDLC/PPP~~PPP/HDLC~~ and GFP frame relationships

3) **Clause 7.6 (from Amendment 1)**

Modify clause 7.6 (from Amendment 1) as follows:

7.6 Direct mapping of ~~unicast~~ MPLS into GFP-F frames

The direct mapping of MPLS into GFP is intended for applications that wish to transport MPLS-shim PDUs directly over SDH containers. The MPLS PDU, either unicast or multicast, contains one or more MPLS-specific label stack entries (as specified in RFC 3032) and an MPLS payload information field. ~~The unicast MPLS PDU frame contains one or more MPLS-specific label stack entries (as specified in RFC 3032) and a MPLS payload information field.~~ All octets in the ~~unicast~~ MPLS PDU are placed in the Payload Information field of a GFP-F frame. Both octet-alignment and bit identification within octets are maintained within the GFP-F PDU. This direct mapping of ~~unicast~~ MPLS into GFP is intended to be the default mapping when ~~unicast~~ MPLS client signals are directly carried over a transport network.

The GFP Payload FCS is required and is computed as specified in 6.1.2.2.1.1 and inserted in the pFCS field. The PFI field is set to 1.

This relationship between ~~the unicast~~ MPLS PDU and GFP-F frame is illustrated in Figure 7-y.

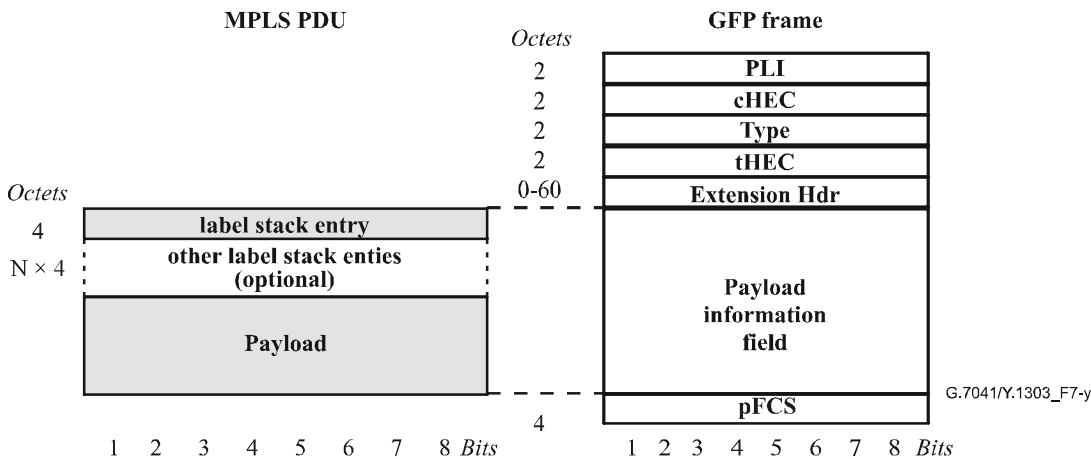


Figure 7-y/G.7041/Y.1303 – MPLS PDU and GFP frame relationships

NOTE 1 — This mapping allows only for the transport of MPLS encapsulated information. Treatment of MPLS control plane traffic which can be transported using IP without MPLS encapsulation is out of the scope of this sub-clause.

NOTE 2 — The mapping of multicast MPLS PDU frames is for further study.

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