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**SERIES G: TRANSMISSION SYSTEMS AND MEDIA,
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Packet over Transport aspects – MPLS over Transport
aspects

**SERIES Y: GLOBAL INFORMATION
INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS,
NEXT-GENERATION NETWORKS, INTERNET OF
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Internet protocol aspects – Transport

Terms and definitions for MPLS transport profile

Recommendation ITU-T G.8101/Y.1355

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Recommendation ITU-T G.8101/Y.1355

Terms and definitions for MPLS transport profile

Summary

Recommendation ITU-T G.8101/Y.1355 is a compilation of terms and abbreviations used in Recommendations associated with multiprotocol label switching transport profile (MPLS-TP).

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Recommendation ITU-T G.8101/Y.1355

Terms and definitions for MPLS transport profile

1 Scope

This Recommendation contains a complete listing of the definitions and abbreviations used in the Recommendations associated with multiprotocol label switching transport profile (MPLS-TP) listed in Appendix I.

This Recommendation provides a representation of the MPLS-TP technology using the methodologies that have been used for other transport technologies, e.g., synchronous digital hierarchy (SDH), optical transport network (OTN) and Ethernet¹.

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.704] Recommendation ITU-T G.704 (1998), *Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels.*
- [ITU-T G.705] Recommendation ITU-T G.705 (2000), *Characteristics of plesiochronous digital hierarchy (PDH) equipment functional blocks.*
- [ITU-T G.780] Recommendation ITU-T G.780/Y.1351 (2010), *Terms and definitions for synchronous digital hierarchy (SDH) networks.*
- [ITU-T G.805] Recommendation ITU-T G.805 (2000), *Generic functional architecture of transport networks.*
- [ITU-T G.806] Recommendation ITU-T G.806 (2012), *Characteristics of transport equipment – Description methodology and generic functionality.*
- [ITU-T G.808] Recommendation ITU-T G.808 (2016), *Terms and definitions for network protection and restoration.*
- [ITU-T G.832] Recommendation ITU-T G.832 (1998), *Transport of SDH elements on PDH networks – Frame and multiplexing structures.*
- [ITU-T G.7710] Recommendation ITU-T G.7710/Y.1701 (2012), *Common equipment management function requirements.*
- [ITU-T G.7712] Recommendation ITU-T G.7712/Y.1703 (2010), *Architecture and specification of data communication network.*
- [ITU-T G.8001] Recommendation ITU-T G.8001/Y.1354 (2016), *Terms and definitions for Ethernet frames over transport.*

¹ This ITU-T Recommendation is intended to be aligned with the IETF MPLS RFCs normatively referenced by this Recommendation.

- [ITU-T G.8112] Recommendation ITU-T G.8112/Y.1371 (2015), *Interfaces for the MPLS transport profile layer network*.
- [ITU-T G.8131] Recommendation ITU-T G.8131/Y.1382 (2014), *Linear protection switching for MPLS transport profile*.
- [ITU-T M.3010] Recommendation ITU-T M.3010 (2000), *Principles for a telecommunications management network*.
- [ITU-T M.3013] Recommendation ITU-T M.3013 (2000), *Considerations for a telecommunications management network*.
- [ITU-T M.3100] Recommendation ITU-T M.3100 (2005), *Generic network information model*.
- [ITU-T X.700] Recommendation ITU-T X.700 (1992), *Management framework for Open Systems Interconnection (OSI) for CCITT applications*.
- [ITU-T X.701] Recommendation ITU-T X.701 (1997), *Information technology – Open Systems Interconnection – Systems management overview*.
- [ITU-T X.731] Recommendation ITU-T X.731 (1992) | ISO/IEC 10164-2:1993, *Information technology – Open Systems Interconnection – Systems management: State management function*.
- [IETF RFC 3031] IETF RFC 3031 (2001), *Multiprotocol Label Switching Architecture*.
- [IETF RFC 3032] IETF RFC 3032 (2001), *MPLS Label Stack Encoding*.
- [IETF RFC 3270] IETF RFC 3270 (2002), *Multi-Protocol Label Switching (MPLS) Support of Differentiated Services*.
- [IETF RFC 5462] IETF RFC 5462 (2009), *Multiprotocol Label Switching (MPLS) Label Stack Entry: "EXP" Field Renamed to "Traffic Class" Field*.
- [IETF RFC 5586] IETF RFC 5586 (2009), *MPLS Generic Associated Channel*.
- [IETF RFC 5921] IETF RFC 5921 (2010), *A Framework for MPLS in Transport Networks*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 1+1 (protection) architecture: [ITU-T G.808]

NOTE – 1+1 protection architecture is referred to in [ITU-T G.8131].

3.1.2 1:n (protection) architecture: [ITU-T G.808]

NOTE – 1:n protection architecture is referred to in [ITU-T G.8131].

3.1.3 1-phase (APS protocol): [ITU-T G.808]

NOTE – 1-phase is referred to in [ITU-T G.8131].

3.1.4 2-phase (APS protocol): [ITU-T G.808]

NOTE – 2-phase is referred to in [ITU-T G.8131].

3.1.5 3-phase (APS protocol): [ITU-T G.808]

NOTE – 3-phase is referred to in [ITU-T G.8131].

3.1.6 active transport entity: [ITU-T G.808]

NOTE – active transport entity is referred to in [ITU-T G.8131].

3.1.7 access point: [ITU-T G.805]

NOTE – Access point is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.8 adapted information: [ITU-T G.805]

NOTE – Adapted information is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.9 administrative domain: [ITU-T G.805]

NOTE – Administrative domain is referred to in [b-ITU-T G.8110.1].

3.1.10 agent: [ITU-T X.701]

NOTE – Agent is referred to in [b-ITU-T G.8151].

3.1.11 administrative state: [ITU-T X.731]

NOTE – Administrative state is referred to in [b-ITU-T G.8110.1].

3.1.12 alarm reporting: [ITU-T M.3013]

NOTE – Alarm reporting is referred to in [b-ITU-T G.8151].

3.1.13 alarm reporting control (ARC): [ITU-T M.3013]

NOTE – Alarm reporting control (ARC) is referred to in [b-ITU-T G.8151].

3.1.14 APS protocol: [ITU-T G.808]

NOTE – APS protocol is referred to in [ITU-T G.8131].

3.1.15 architecture: [ITU-T G.808]

NOTE – architecture is referred to in [ITU-T G.8131].

3.1.16 associated channel header: [IETF RFC 5586]

NOTE – Associated channel header is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.17 atomic function (AF): [ITU-T G.806]

NOTE – Atomic function (AF) is referred to in [b-ITU-T G.8151].

3.1.18 bidirectional protection switching: [ITU-T G.780]

NOTE – Bidirectional protection switching is referred to in [ITU-T G.8131].

3.1.19 bridge: [ITU-T G.808]

NOTE – bridge is referred to in [ITU-T G.8131].

3.1.20 bottom of stack: [IETF RFC 3032]

NOTE – Bottom of stack is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.21 characteristic information: [ITU-T G.805]

NOTE – Characteristics information is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.22 client/server relationship: [ITU-T G.805]

NOTE – Client/server relationship is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.23 connection: [ITU-T G.805]

NOTE – Connection is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.24 connection point: [ITU-T G.805]

NOTE – Connection point is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.25 connection supervision: [ITU-T G.805]

NOTE – Connection supervision is referred to in [b-ITU-T G.8110.1].

3.1.26 customer edge (CE): [IETF RFC 5921]

NOTE – CE is referred to in [ITU-T G.8112].

3.1.27 data communication network (DCN): [ITU-T G.7712]

NOTE – Data communication network (DCN) is referred to in [b-ITU-T G.8151].

3.1.28 defect: [ITU-T G.806]

NOTE – Defect is referred to in [b-ITU-T G.8113.1], [b-ITU-T G.8113.2] and [ITU-T G.8131].

3.1.29 dual-ended: [ITU-T G.8001]

NOTE – Dual-ended is referred to in [b-ITU-T G.8152].

3.1.30 explicitly TC-encoded-PSC LSP: [IETF RFC 5462]

NOTE – Explicitly TC-encoded-PSC LSP is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.31 failure: [ITU-T G.806]

NOTE – Failure is referred to in [b-ITU-T G.8113.1], [b-ITU-T G.8113.2] and [ITU-T G.8131].

3.1.32 forced switch: [ITU-T G.808]

NOTE – forced switch is referred to in [ITU-T G.8131].

3.1.33 G-ACh label: [IETF RFC 5586]

NOTE – G-ACh Label is referred to in [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.34 G-ACh packet: [IETF RFC 5586]

NOTE – G-ACh packet is referred to in [b-ITU-T G.8110.1].

3.1.35 G-ACh packet payload: [IETF RFC 5586]

NOTE – G-ACh packet payload is referred to in [b-ITU-T G.8110.1].

3.1.36 generic associated channel: [IETF RFC 5586]

NOTE – Generic associated channel is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.37 hold-off time: [ITU-T G.808]

NOTE – hold-off time is referred to in [ITU-T G.8131].

3.1.38 label: [IETF RFC 3031]

NOTE – Label is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].

3.1.39 label inferred PHB scheduling class LSP: [IETF RFC 3270]

NOTE – Label inferred PHB scheduling class LSP is referred to in [b-ITU-T G.8110.1], [b-ITU-T G.8121], [b-ITU-T G.8121.1] and [b-ITU-T G.8121.2].