ITU-T

G.8101/Y.1355

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU (10/2012)

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Packet over Transport aspects – MPLS over Transport aspects

SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS AND NEXT-GENERATION NETWORKS

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 multi-protocol label switching Transport Profile (MPLS-TP) Recommendations.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T G.8101/Y.1355	2006-12-14	15
2.0	ITU-T G.8101/Y.1355	2010-07-29	15
3.0	ITU-T G.8101/Y.1355	2012-10-29	15

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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.

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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 multi-protocol 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 Ethernet).¹

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.805]	Recommendation ITU-T G.805 (2000), Generic functional architecture of transport networks.
[ITU-T G.806]	Recommendation ITU-T G.806 (2009), Characteristics of transport equipment – Description methodology and generic functionality.
[ITU-T G.870]	Recommendation ITU-T G.870/Y.1352 (2012) Terms and definitions for optical transport networks.
[ITU-T G.7710]	Recommendation ITU-T G.7710/Y.1701 (2007), Common equipment management function requirements, plus Corrigendum 1 (2009).
[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 (2012), Terms and definitions for Ethernet frames over transport.
[ITU-T G.8110.1]	Recommendation ITU-T G.8110.1/Y.1370.1 (2011), Architecture of the Multi-Protocol Label Switching transport profile layer network.
[ITU-T G.8112]	Recommendation ITU-T G.8112/Y.1371 (2012), <i>Interfaces for the MPLS Transport Profile (MPLS-TP) layer network.</i>
[ITU-T G.8121]	Recommendation ITU-T G.8121/Y.1381 (2012), <i>Characteristics of MPLS-TP equipment functional blocks</i> , plus Amendment 1 (2012).
[ITU-T G.8151]	Recommendation ITU-T G.8151/Y.1374 (2012), Management aspects of the MPLS-TP network element, plus Amendment 1 (2012).

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

[ITU-T M.3010]	Recommendation ITU-T M.3010 (2000) and Amendments, <i>Principles for a telecommunications management network</i> .
[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

The following terms are defined in [ITU-T G.805]:

3.1.1 access point.

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

3.1.2 adapted information.

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

3.1.3 administrative domain.

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

3.1.4 characteristic information.

NOTE – Characteristic information is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

3.1.5 client/server relationship.

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

3.1.6 connection.

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

3.1.7 connection point.

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

3.1.8 connection supervision.

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

- **3.1.9** layer network.
- NOTE Layer network is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- 3.1.10 link.
- NOTE Link is referred to in [ITU-T G.8110.1].
- **3.1.11** link connection.
- NOTE Link connection is referred to in [ITU-T G.8110.1].
- **3.1.12** matrix.
- NOTE Matrix is referred to in [ITU-T G.8121].
- **3.1.13** network.
- NOTE Network is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.14** network connection.
- NOTE Network connection is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.15** reference point.
- NOTE Reference point is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.16** sublayer.
- NOTE Sublayer is referred to in [ITU-T G.8110.1].
- **3.1.17** subnetwork.
- NOTE Subnetwork is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.18** subnetwork connection.
- NOTE Subnetwork connection is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.19** tandem connection.
- NOTE Tandem connection is referred to in [ITU-T G.8110.1].
- **3.1.20** termination connection point.
- NOTE Termination connection point is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.21** trail.
- NOTE Trail is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.22** trail termination.
- NOTE Trail termination is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.23** transport.
- NOTE Transport is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.24** transport entity.
- NOTE Transport entity is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.25** transport processing function.
- NOTE Transport processing function is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.26** unidirectional connection.
- NOTE Unidirectional connection is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].
- **3.1.27** unidirectional trail.
- NOTE Unidirectional trail is referred to in [ITU-T G.8121].

The following terms are defined in [ITU-T G.806]:

3.1.28 atomic function (AF).

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

3.1.29 management point (MP).

NOTE – Management point (MP) is referred to in [ITU-T G.8151].

The following terms are defined in [ITU-T G.7710]:

3.1.30 local craft terminal.

NOTE – Local craft terminal is referred to in [ITU-T G.8151].

3.1.31 management application function (MAF).

NOTE – Management application function (MAF) is referred to in [ITU-T G.8151].

The following term is defined in [ITU-T G.7712]:

3.1.32 data communication network (DCN).

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

The following terms are defined in [ITU-T M.3010]:

3.1.33 network element (NE).

NOTE – Network element (NE) is referred to in [ITU-T G.8151].

3.1.34 network element function (NEF).

NOTE – Network element function (NEF) is referred to in [ITU-T G.8151].

3.1.35 Q-Interface.

NOTE – Q-Interface is referred to in [ITU-T G.8151].

3.1.36 workstation function (WF).

NOTE – Workstation function (WF) is referred to in [ITU-T G.8151].

The following term is defined in [ITU-T M.3013]:

3.1.37 message communication function (MCF).

NOTE – Message communication function (MCF) is referred to in [ITU-T G.8151].

The following terms are defined in [ITU-T M.3100]:

3.1.38 alarm reporting.

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

3.1.39 alarm reporting control (ARC).

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

3.1.40 managed entity.

NOTE – Managed entity is referred to in [ITU-T G.8151].

3.1.41 management interface.

NOTE – Management interface is referred to in [ITU-T G.8151].

3.1.42 persistence interval.

NOTE – Persistence interval is referred to in [ITU-T G.8151].

3.1.43 operations system (OS).

NOTE – Operations System (OS) is referred to in [ITU-T G.8151].

3.1.44 operations system function (OSF).

NOTE – Operations system function (OSF) is referred to in [ITU-T G.8151].

3.1.45 qualified problem.

NOTE – Qualified problem is referred to in [ITU-T G.8151].

3.1.46 reset threshold report.

NOTE – Reset threshold report is referred to in [ITU-T G.8151].

3.1.47 threshold report.

NOTE – Threshold report is referred to in [ITU-T G.8151].

3.1.48 timed interval.

NOTE – Timed interval is referred to in [ITU-T G.8151].

The following term is defined in [ITU-T X.700]:

3.1.49 managed object (MO).

NOTE – Managed object (MO) is referred to in [ITU-T G.8151].

The following terms are defined in [ITU-T X.701]:

3.1.50 agent.

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

3.1.51 manager.

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

3.1.52 managed object class (MOC).

NOTE – Managed object class (MOC) is referred to in [ITU-T G.8151].

The following term is defined in [ITU-T X.731]:

3.1.53 administrative state.

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

The following terms are defined in [ITU-T G.870]:

3.1.54 network survivability.

NOTE – Network survivability state is referred to in [ITU-T G.8110.1]

3.1.55 protection.

NOTE – Protection is referred to in [ITU-T G.8110.1]

3.1.56 restoration.

NOTE – Restoration is referred to in [ITU-T G.8110.1]

The following terms are defined in [ITU-T G.8001]:

3.1.57 maintenance entity.

 $NOTE-Maintenance\ entity\ is\ referred\ to\ in\ [ITU-T\ G.8110.1].$

3.1.58 maintenance entity group.

NOTE – Maintenance entity group is referred to in [ITU-T G.8110.1].

3.1.59 maintenance entity group intermediate point compound function.

NOTE – Maintenance entity group intermediate point compound function is referred to in [ITU-T G.8110.1].

3.1.60 on-demand monitoring.

NOTE – On-demand monitoring is referred to in [ITU-T G.8110.1].

3.1.61 pro-active monitoring.

NOTE – Pro-active monitoring is referred to in [ITU-T G.8110.1].

The following terms are defined in [ITU-T G.8112]:

3.1.62 MPLS-TP_CI traffic unit.

NOTE -MPLS-TP_CI traffic unit is referred to in [ITU-T G.8112].

3.1.63 MTH-NNI.

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

3.1.64 NNI.

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

The following terms are defined in [IETF RFC 3031]:

3.1.65 label.

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

3.1.66 label stack.

NOTE – Label stack is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

3.1.67 label switched path.

NOTE – Label switched path (LSP) is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

3.1.68 MPLS label stack.

NOTE – MPLS label stack is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

The following terms are defined in [IETF RFC 3032]:

3.1.69 bottom of stack.

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

3.1.70 label value.

NOTE – Label value is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

3.1.71 time to live.

NOTE – Time to live is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

The following terms are defined in [IETF RFC 3270]:

3.1.72 label inferred PHB scheduling class LSP.

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

3.1.73 per-hop behaviour.

NOTE – Per-hop behaviour is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

The following terms are defined in [IETF RFC 5462]:

3.1.74 explicitly TC-encoded-PSC LSP.

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

3.1.75 traffic class.

NOTE – Traffic class is referred to in [ITU-T G.8121] and [ITU-T G.8110.1].

The following terms are defined in [IETF RFC 5586]:

3.1.76 associated channel header.

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

3.1.77 generic associated channel.

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

3.1.78 G-Ach Label.

NOTE – G-Ach label is referred to in [ITU-T G.8121].

3.1.79 G-Ach packet.

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

3.1.80 G-Ach packet payload.

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

The following terms are defined in [IETF RFC 5921]:

3.1.81 MPLS Transport Profile (MPLS-TP).

NOTE – MPLS Transport Profile (MPLS-TP) is referred to in [ITU-T G.8110.1].

3.1.82 MPLS-TP LSP.

NOTE – MPLS-TP LSP is referred to in [ITU-T G.8110.1].

3.1.83 pseudowire.

NOTE – Pseudowire is referred to in [ITU-T G.8110.1].

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 MPLS-TP Management Network (MT.MN): An MPLS-TP Management Network is a subset of a TMN that is responsible for managing those parts of a network element that contain MPLS-TP layer network entities. An MT.MN may be subdivided into a set of MPLS-TP Management SubNetworks (MT.MSNs).

NOTE – MPLS-TP Management Network (MT.MN) is referred to in [ITU-T G.8151].

3.2.2 MPLS-TP Management SubNetwork (MT.MSN): An MPLS-TP Management SubNetwork (MT.MSN) consists of a set of separate Embedded Control Channels (ECC) and associated intra-site data communication links which are interconnected to form a Data Communications Network (DCN) within any given MPLS-TP transport topology. For an MPLS-TP, the physical channel supporting the ECC is the MPLS-TP Management Communication Channel (MCC) as defined in [ITU-T G.7712]. An MT.MSN represents an MPLS-TP specific Local Communication Network (LCN) portion of a network operator's overall Data Communication Network or TMN.

NOTE – MPLS-TP Management SubNetwork (MT.MSN) is referred to in [ITU-T G.8151].

3.2.3 MPLS-TP Network Element (MT.NE): That part of a network element that contains entities from one or more MPLS-TP layer networks. An MT.NE may therefore be a standalone physical entity or a subset of a network element. It supports at least Network Element Functions (NEFs) and may also support an Operations System Function (OSF). It contains Managed Objects (MOs), a Message Communication Function (MCF) and a Management Application Function (MAF). The functions of an MT.NE may be contained within an NE that also supports other layer networks. These layer network entities are considered to be managed separately from MPLS-TP entities. As such they are not part of the MT.MN or MT.MSN.

NOTE – MPLS-TP Network Element (MT.NE) is referred to in [ITU-T G.8151].

4 Abbreviations and acronyms

The following abbreviations and acronyms are used in a series of MPLS-TP Recommendations.

NOTE – The purpose of this clause 4 is to define a single abbreviation or acronym and thereby avoid any overlap among MPLS-TP Recommendations.

ACH Associated Channel Header

AcSL Accepted Signal Label

AF Atomic Function

AI Adapted Information

AIS Alarm Indication Signal

ALM ALarM reporting

AP Access Point

APS Automatic Protection Switching

ARC Alarm Reporting Control

CC Continuity Check

CI Characteristic Information

CII Common Interworking Indicators

CLNE Client Layer Network Entity

CoS Class of Service
CtrlP Control Plane
CW Control Word

CO-PS Connection-Oriented Packet Switched

CP Connection Point

CV Connectivity Verification

D Data (i.e., traffic unit)
DA Destination Address

DCN Data Communications Network

DE Drop Eligibility

DM Delay Measurement

DP Drop Precedence

DT Diagnostic Test

ECC Embedded Communication Channel

ECC Embedded Control Channel

ECMP Equal Cost Multi-Path

E-LSP Explicitly TC-encoded-PSC LSP
EMF Equipment Management Function

ETH Ethernet MAC layer network

ETH_CI Ethernet MAC Characteristic Information

ETY Ethernet PHY layer network

FCAPS Fault Management, Configuration Management, Account Management,

Performance Management and Security Management

FFS For Further Study

FP Flow Point

FTP Flow Termination Point

GAL Generic Associated Channel (G-Ach) Label

G-ACh Generic Associated Channel
GFP Generic Framing Procedure

GFP-F Generic Framing Procedure – Frame Mapped

GNE Gateway Network Element

ICC ITU Carrier Code

IaDI Intra-Domain Interface

IP Internet Protocol

IrDI Inter-Domain Interface

iPHB Incoming Per Hop Behaviour

LAN Local Area Network

LC Link Connection

LCAS Link Capacity Adjustment Scheme

LCK Locked

LCN Local Communication Network

LCT Local Craft Terminal

L-LSP Label-Only-Inferred PSC LSP

LM Loss Measurement
LSE Label Stack Entry
LSP Label Switched Path

MAC Media Access Control

MAF Management Application Function

MCC Management Communication Channel

MCF Message Communication Function

MD Mediation Device
ME Maintenance Entit

ME Maintenance Entity
MEG Maintenance Entity Grou

MEG Maintenance Entity Group

MEP Maintenance entity group End Point

MF Mediation Function
MgmtP Management Plane

MI Management Information

MIB Management Information Base

MIP Maintenance entity group Intermediate Point

MN Management Network

MO Managed Object

MOC Managed Object Class
MoE MPLS-TP over ETH

MoO MPLS-TP over OTH

MoP MPLS-TP over PDH

MoS MPLS-TP over SDH

MP Management Point

MPLS Multi-Protocol Label Switching

MPLS-TP Multi-Protocol Label Switching – Transport Profile

MPLS-TPP MPLS-TP Path

MPLS-TPT MPLS-TP Tandem connection monitoring

M_SDU MAC Service Data Unit

MSN Management SubNetwork

MS-PW Multi-Segment Pseudowire

MT Multi-Protocol Label Switching – Transport Profile

MT.C MPLS-TP Channel layer

MT.MN MPLS-TP MN

MT.MSN MPLS-TP MSN

MT.NE MPLS-TP NE

MT.P MPLS-TP Path layer

MT.S MPLS-TP Section layer

MTD MPLS-TP Diagnostic function

MTDi MPLS-TP Diagnostic function within MTx MIP

MTH MPLS-TP Layer Network

MTH-NNI MPLS-TP Layer Network – Network Node Interface

MTM-n MPLS-TP Transport Module layer n

MTP MPLS-TP path layer

MTS MPLS-TP Section

NALM No ALaRm reporting

NALM-CD No ALaRm reporting, Count Down

NALM-NR No ALaRm reporting, Not Ready

NALM-QI No ALaRm reporting, Qualified Inhibit

NALM-TI No ALaRm reporting, Timed Inhibit

NC Network Connection

NE Network Element

NEF Network Element Function NEL Network Element Layer

NSP Native Service Processing

NNI Network Node Interface or Network Network Interface

NMS Network Management System

OAM Operations, Administration and Maintenance

OAM&P Operations, Administration, Maintenance and Provisioning

ODU Optical channel Data Unit

ODUj Optical Channel Data Unit – order j

ODUj-Xv Virtual concatenated Optical Channel Data Unit – order j

ODUk Optical Channel Data Unit – order k

ODUk-Xv Virtual concatenated Optical Channel Data Unit – order k

oPHB Outgoing Per Hop Behaviour

OPU Optical Payload Unit

OPUk Optical Payload Unit of level k

OPUk-Xv Virtually concatenated Optical Payload Unit of level k

OS Operations System

OSF Operations System Function
OSI Open Systems Interconnection
OTH Optical Transport Hierarchy
OTN Optical Transport Network

o on-demand proactive

p2mp point-to-multipoint

p2p point-to-point

P11s 1 544 kbit/s PDH path layer with synchronous 125 µs frame structure according to

ITU-T G.704

P12s 2 048 kbit/s PDH path layer with synchronous 125 µs frame structure according to

ITU-T G.704

P31s 34 368 kbit/s PDH path layer with synchronous 125 µs frame structure according to

ITU-T G.832

P32e 44 736 kbit/s PDH path layer with frame structure according to ITU T G.704

P Priority

PA (Ethernet) Preamble

PDH Plesiochronous Digital Hierarchy

PHB Per Hop Behaviour

PHP Penultimate Hop Popping

PHY Physical

PID Protocol Identifier

PM Performance Monitoring

PMC Performance Monitoring Clock

PSC PHB Scheduling Class

PSI Payload Structure Indication

PT Payload Type PW Pseudowire

QoS Quality of Service RES Reserved overhead

RFC Request for Comments

RDI Remote Detect Indication

RT Route Trace

RTC Real Time Clock
SA Source Address

S-bit Bottom of Stack indicator

SCC Signalling Communication Channel
SCN Signalling Communication Network

SDH Synchronous Digital Hierarchy

SFD Start of Frame Delimiter

Sk Sink

SN Sub-Network

SNAP Sub-Network Access Protocol

SNC Sub-Network Connection

SNC/S SNCP with Sublayer monitoring

SNCP Sub-Network Connection Protection

So Source

SPME Sub-Path Maintenance Element

SSF Server Signal Fail²

SS-PW Single-Segment Pseudowire

STM-N Synchronous Transport Module – level N

TC Traffic Class

TCM Tandem Connection Monitoring
TCP Termination Connection Point

² The IETF has not yet selected a term for this abstract information element.

TFP Termination Flow Point

TH Throughput

TNE Transport Network Element

TLV Type Length Value

TMN Telecommunication Management Network

TSD Trail Signal Degrade

TSF Trail Signal Fail
TT Trail Termination

TTL Time-To-Live

TTSI Trail Termination Source Identifier

VC Virtual Container

VC-m Lower Order VC – order m VC-n Higher Order VC – order n

VC-n-Xc Contiguous concatenated VC – order n

VC-n-Xv Virtual concatenated VC – order n

vcPT virtual concatenation Payload Type

VcPLM Virtual concatenation Payload Mismatch

WAN Wide Area Network

WS WorkStation

WTR Wait To Restore

Appendix I

List of source Recommendations

(This appendix does not form an integral part of this Recommendation.)

This text is an updated version of Recommendation ITU-T G.8101/Y.1355 – "Terms and definitions for MPLS transport profile". The abbreviations and terms were taken from the Recommendations listed below. Where the definitions were not a part of an explicit Definitions clause of the source Recommendation, the source Recommendation is referenced in a Note following the definition. After this Recommendation is finally approved, corrigenda or revisions to the original sources of these terms will be proposed to replace the definitions in those documents by references to this one (except where the definition is part of the source Recommendation text and not in a definitions clause). The end result should be a single normative definition for each term in this subject area, contained in this Recommendation.

ITU-T Recommendation	Latest version	MPLS-TP specific definitions
G.7712/Y.1703	09/2010	No
G.8110.1/Y.1370.1	12/2011	No
G.8112/Y.1371	09/2012	Yes
G.8121/Y.1381	12/2011 with Amd.1	No
G.8151/Y.1374	12/2011 with Amd.1	Yes

Appendix II

Terms and definitions for MPLS transport profile defined by the IETF

(This appendix does not form an integral part of this Recommendation.)

The following IETF RFC/I-D contain provisions which, through reference in this text, constitute provisions of this appendix. At the time of publication, the editions indicated were valid. All RFC/I-D are subject to revision; users of this list are therefore encouraged to investigate the possibility of applying the most recent edition of the RFC/I-Ds listed below.

[IETF tp-rosetta-stone] IETF Internet Draft draft-ietf-mpls-tp-rosetta-stone-04 (2011), A

Thesaurus for the Terminology used in Multiprotocol Label Switching Transport Profile (MPLS-TP) drafts/RFCs and ITU-T's Transport

Network Recommendations.

[IETF RFC 6291] IETF RFC 6291 (2011), Guidelines for the Use of the "OAM" Acronym

in the IETF.

II.1 Definitions

The following terms are defined in [IETF RFC 6291]:

- II.1.1 Mgmt.
- **II.1.2** OAM.
- II.1.3 O&M.
- **II.1.4** SDO.

The following terms are defined in [IETF tp-rosetta-stone]:

- **II.1.5** associated bidirectional path.
- **II.1.6** bidirectional path.
- **II.1.7** client layer network.
- **II.1.8** concatenated segment.
- **II.1.9** control plane.
- **II.1.10** co-routed bidirectional path.
- **II.1.11** domain.
- **II.1.12** layer network.
- **II.1.13** link.
- **II.1.14** MPLS-TP logical ring.
- **II.1.15** MPLS-TP physical ring.
- **II.1.16** MPLS-TP ring topology.
- **II.1.17** path.
- **II.1.18** section layer network.
- **II.1.19** segment.
- **II.1.20** server layer.
- **II.1.21** span.

- II.1.22 sublayer.
- **II.1.23** tandem connection.
- **II.1.24** transport network.
- **II.1.25** transport path.
- **II.1.26** transport path layer.
- **II.1.27** transport service layer.
- **II.1.28** transmission media layer.
- **II.1.29** unidirectional path.
- **II.1.30** failure.
- **II.1.31** fault.
- II.1.32 defect.
- **II.1.33** MPLS transport profile (MPLS-TP).
- **II.1.34** MPLS section.
- **II.1.35** MPLS-TP NE.
- **II.1.36** MPLS-TP network.
- **II.1.37** equipment management function (EMF).
- **II.1.38** data communication network (DCN).
- **II.1.39** communication channel (CC).
- **II.1.40** embedded communication channel (ECC).
- **II.1.41** management communication channel (MCC).
- **II.1.42** management communication network (MCN).
- **II.1.43** signaling communication channel (SCC).
- **II.1.44** signaling communication network (SCN).
- **II.1.45** operations system (OS).
- **II.1.46** maintenance entity.
- **II.1.47** maintenance end points (MEPs).
- NOTE Should be Maintenance Entity Group End Points.
- **II.1.48** maintenance intermediate points (MIPs).
- NOTE Should be Maintenance Entity Group Intermediate Points.
- **II.1.49** server MEPs.

II.2 Abbreviations

The following terms are used in IETF RFCs/I-Ds:

- CC Communications Channel
- DCN Data Communication Network
- ECC Embedded Communication Channel
- EMF Equipment Management Function
- MCC Management Communication Channel

MCN Management Communication Network

ME Maintenance Entity

MEG ME Group

MEP MEG End Point

MIP MEG Intermediate Point

Mgmt Management

MPLS Multiprotocol Label Switching

MPLS-TP MPLS Transport Profile

NE Network Element

OAM Operations, Administration and Maintenance

O&M OAM and Management

SCC Signaling Communication ChannelSCN Signaling Communication Network

SDO Standards Development Organization

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1100–Y.1199 1200–Y.1299 1300–Y.1399
1200–Y.1299 1300–Y.1399
1300-Y.1399
1400 V 1400
1400-1.1477
1500-Y.1599
1600–Y.1699
1700–Y.1799
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2000-Y.2099
2100-Y.2199
2200-Y.2249
2250-Y.2299
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