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SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

Packet over Transport aspects – Ethernet over Transport aspects

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

Internet protocol aspects – Transport

Terms and definitions for Ethernet frames over transport

Recommendation ITU-T G.8001/Y.1354

ITU-T G-SERIES RECOMMENDATIONS

TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

INTERNATIONAL TELEPHONE CONNECTIONS AND CIRCUITS	G.100–G.199
GENERAL CHARACTERISTICS COMMON TO ALL ANALOGUE CARRIER-TRANSMISSION SYSTEMS	G.200–G.299
INDIVIDUAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON METALLIC LINES	G.300–G.399
GENERAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON RADIO-RELAY OR SATELLITE LINKS AND INTERCONNECTION WITH METALLIC LINES	G.400–G.449
COORDINATION OF RADIOTELEPHONY AND LINE TELEPHONY	G.450–G.499
TRANSMISSION MEDIA AND OPTICAL SYSTEMS CHARACTERISTICS	G.600–G.699
DIGITAL TERMINAL EQUIPMENTS	G.700–G.799
DIGITAL NETWORKS	G.800–G.899
DIGITAL SECTIONS AND DIGITAL LINE SYSTEM	G.900–G.999
MULTIMEDIA QUALITY OF SERVICE AND PERFORMANCE – GENERIC AND USER-RELATED ASPECTS	G.1000–G.1999
TRANSMISSION MEDIA CHARACTERISTICS	G.6000–G.6999
DATA OVER TRANSPORT – GENERIC ASPECTS	G.7000–G.7999
PACKET OVER TRANSPORT ASPECTS	G.8000–G.8999
Ethernet over Transport aspects	**G.8000–G.8099**
MPLS over Transport aspects	G.8100–G.8199
Quality and availability targets	G.8200–G.8299
Service Management	G.8600–G.8699
ACCESS NETWORKS	G.9000–G.9999

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

Recommendation ITU-T G.8001/Y.1354

Terms and definitions for Ethernet frames over transport

Summary

Recommendation ITU-T G.8001/Y.1354 provides definitions and abbreviations used in Ethernet frames over transport.

History

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1.0	ITU-T G.8001/Y.1354	2006-06-06	15
1.1	ITU-T G.8001/Y.1354 (2006) Amd. 1	2007-07-29	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.

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Table of Contents

Recommendation ITU-T G.8001/Y.1354

Terms and definitions for Ethernet frames over transport

1 Scope

This Recommendation contains a complete listing of the definitions and abbreviations used in the Recommendations associated with Ethernet over transport (EoT).

2 References

None.

3 Definitions

This Recommendation defines the following terms:

3.1 access link: The connection between the customer equipment and carrier equipment at the edge of the transport network that is realized through a user-to-network interface (UNI).

3.2 backbone Ethernet connection: An Ethernet connection (EC) whose traffic units are encapsulated with a backbone VLAN tag (B-Tag) when they are transported through an Ethernet link. Outside an Ethernet link, the traffic units are without a backbone VLAN tag. The information transported in the backbone VLAN tag is presented as a set of parameters: priority, drop eligible and EC identifier. The link end performs the mapping of those parameters into the backbone VLAN tag and the demapping of these parameters from the backbone VLAN tag.

NOTE – Backbone Ethernet connection is referred to in [b-ITU-T G.8012.1].

3.3 backbone service Ethernet connection: An Ethernet connection (EC) whose traffic units are encapsulated with the first 48-bits of a backbone service instance tag (I-Tag) when they are transported through an Ethernet link. Outside an Ethernet link, the traffic units are without a backbone service instance tag. The information transported in the backbone service instance tag is presented as a set of parameters: priority, drop eligible, and EC identifier. The link end performs the mapping of these parameters into the backbone service instance tag and the demapping of these parameters from the backbone service instance tag.

NOTE – Backbone service Ethernet connection is referred to in [b-ITU-T G.8012.1].

3.4 customer: The entity that has ownership authority over a set of flow points. The customer may have one or more service instances.

NOTE – Customer is referred to in [b-ITU-T G.8011].

3.5 customer Ethernet connection: An Ethernet connection (EC) whose traffic units are encapsulated with a customer VLAN tag (C-Tag) when they are transported through an Ethernet link. Outside an Ethernet link, the traffic units are without a customer VLAN tag. The information transported in the customer VLAN tag is presented as a set of parameters: priority, drop eligible and EC identifier. The link end performs the mapping of these parameters into the customer VLAN tag and the demapping of these parameters from the customer VLAN tag.

NOTE – Customer Ethernet connection is referred to in [b-ITU-T G.8012.1].

3.6 EoT management communication channel (EoT.MCC): The Ethernet management communication channel (MCC) function provides a management communication channel between a pair of maintenance entity group (MEG) end points. The MCC can be used to perform remote management. The specific use of an MCC is outside the scope of this Recommendation. A MEG end point (MEP) can send a frame with ETH-MCC information to its peer MEP by remote maintenance request, remote maintenance reply, notification, etc. Configuration information needs

to be provisioned to the MEP to support the MCC functions. See [b-ITU-T G.8013] for detailed information and the protocol data unit (PDU) structure of the MCC.

NOTE – EoT.MCC is defined in [b-ITU-T G.8051].

3.7   EoT management network (EoT.MN): An EoT management network is a subset of a TMN that is responsible for managing those parts of a network element that contain EoT layer network entities. An EoT.MN may be subdivided into a set of EoT management subnetworks.

NOTE – EoT.MN is referred to in [b-ITU-T G.8051].

3.8   EoT management subnetwork (EoT.MSN): An EoT management subnetwork (EoT.MSN) consists of a set of separate embedded communication channels (ECC) and associated intra-site data communication links which are interconnected to form a data communication network (DCN) within any given EoT transport topology. For EoT, the physical channel supporting the ECC is the Ethernet management communication channel (MCC) as defined in [b-ITU-T G.8013]. An EoT.MSN represents a specific EoT local communications network (LCN) portion of a network operator's overall data communication network or telecommunications management network (TMN).

NOTE – EoT.MSN is referred to in [b-ITU-T G.8051].

3.9   EoT network element (EoT.NE): That part of a network element that contains entities from one or more EoT layer networks. An EoT.NE may therefore be a stand-alone 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 EoT.NE may be contained within an NE that also supports other layer networks. These layer network entities are considered to be managed separately from EoT entities. As such, they are not part of the EoT.MN or the EoT.MSN.

NOTE – EoT.NE is referred to in [b-ITU-T G.8051].

3.10   EoT-NNI: An NNI for the transfer of Ethernet MAC characteristic information (ETH_CI) traffic units over a transport layer network.

NOTE – EoT-NNI is referred to in [b-ITU-T G.8012].

3.11   EPL type 1: An Ethernet private line (EPL) Type 1 service carries the ETH_CI traffic units between two Ethernet UNIs.

NOTE – EPL types are referred to in [b-ITU-T G.8011.1].

3.12   EPL type 2: An Ethernet private line (EPL) Type 2 service carries the information from the 8B/10B symbol stream between two Ethernet UNIs.

NOTE – EPL types are referred to in [b-ITU-T G.8011.1].

3.13   ERP instance: An Ethernet ring protection (ERP) entity that is responsible for the protection of a subset of the VLANs that transport traffic over the physical Ethernet ring. Each ERP instance is independent of other ERP instances that may be configured on the physical Ethernet ring.

NOTE – ERP instance is referred to in [b-ITU-T G.8032].

3.14   ETH_CI group: A group of Ethernet MAC characteristic information (ETH_CI) signals that is monitored as a single maintenance entity group (MEG). For this purpose, operations, administration and maintenance (OAM) is added to one of the ETH_CI signals in the group.

NOTE – ETH_CI group is referred to in [b-ITU-T G.8010].

3.15   ETH_CI traffic unit: The following set of signals defined in [b-ITU-T G.8010]: Ethernet MAC characteristic information (ETH_CI) Data (D), ETH_CI Priority (P), ETH_CI Drop Eligibility (DE), ETH_CI Server Signal Fail (SSF) and optionally ETH_CI Automatic Protection

Switching (APS). The ETH_CI_D signal carries the traffic unit that consists of the following fields: Destination Address (DA), Source Address (SA) and MAC Service Data Unit (M_SDU).

NOTE – ETH_CI traffic unit is defined in [b-ITU-T G.8010] and referred to in [b-ITU-T G.8012].

3.16   Ethernet connection (EC) or Ethernet virtual connection (EVC)

NOTE – Ethernet connection is referred to in [b-ITU-T G.8011]. In most cases, EC is functionally equivalent to the EVC defined by [b-MEF 10.1].

3.17   Ethernet flow replication point (ETHF_PP): The connection point between <Srv>/ETH adaptation source and sink. The ETH_CI from the source Ethernet flow point (ETH_FP) is replicated and delivered across ETHF_PP to the sink Ethernet termination flow point (ETH_TFP).

NOTE – ETHF_PP is referred to in [b-ITU-T G.8021].

3.18   Ethernet replicated information (ETH_PI): Replicated Ethernet MAC characteristic information (ETH_CI) delivered across the Ethernet termination flow replication point (ETHTF_PP) or the Ethernet flow replication point (ETHF_PP).

NOTE – ETHF_PI is referred to in [b-ITU-T G.8021].

3.19   Ethernet private rooted multipoint service: A rooted multipoint Ethernet virtual connection (EVC) for which several user network interfaces (UNIs) are attached over a dedicated server layer to a common user network interface (UNI).

NOTE – Ethernet private rooted multipoint is referred to in [b-ITU-T G.8011.4].

3.20   Ethernet ring: A collection of Ethernet ring nodes forming a closed physical loop whereby each Ethernet ring node is connected to two adjacent Ethernet ring nodes via a duplex communications facility.

NOTE – Ethernet ring is referred to in [b-ITU-T G.8032].

3.21   Ethernet ring node: A network element which implements at least the following functionalities.

a)   One Ethernet connection function (ETH_C) with a dedicated Ethernet flow forwarding function (ETH_FF) for forwarding ring automatic protection switching (R-APS) control traffic.

b)   Two ring ports, including ETHDi/ETH adaptation function at the ring maintenance entity group level (MEL).

c)   Ethernet ring protection (ERP) control process controlling the blocking and unblocking of traffic over the ring ports.

NOTE – Ethernet ring node is referred to in [b-ITU-T G.8032].

3.22   Ethernet service: An Ethernet service supports an Ethernet flow (as defined in [b-ITU-T G.8010]). It is defined by the topology of the Ethernet network and a corresponding set of attributes associated with the Ethernet connection (EC), the user network interface (UNI) ports and NNI ports.

NOTE – Ethernet service is referred to in [b-ITU-T G.8011].

3.23   Ethernet service area: Identifies the portion of a network that supports an Ethernet service instance.

NOTE – Ethernet service area is referred to in [b-ITU-T G.8011].

3.24   Ethernet service instance: A particular instantiation of an Ethernet service supported by a particular flow domain (as defined in [b-ITU-T G.8010]) with a defined set of characteristics as well as at least two user network interfaces (UNIs).

NOTE – Ethernet service instance is referred to in [b-ITU-T G.8011].

3.25 **Ethernet termination flow replication point (ETHTF_PP)**: Connection point between the <Srv>/ETH adaptation source and the sink. ETH_CI from the source Ethernet termination flow point (ETH_TFP) is replicated and delivered across the ETHTF_PP to the sink filter process.

NOTE – ETHTF_PP is referred to in [b-ITU-T G.8021].

3.26 **Ethernet virtual private line service (EVPL)**: A point-to-point service between two demarcation points.

NOTE – Ethernet virtual private line service is referred to in [b-ITU-T G.8011.2].

3.27 **Ethernet virtual private rooted multipoint service (EVPRM)**: A rooted multipoint Ethernet virtual connection (EVC) for which several user-to- network interfaces (UNIs) are attached (often with multiplexed access) over a dedicated or shared server layer (often over a shared server layer) to a common UNI.

NOTE – Ethernet virtual private rooted multipoint service is referred to in [b-ITU-T G.8011.4].

3.28 **Ethernet virtual private local area network (LAN) service (EVPLAN)**: A multipoint-to-multipoint Ethernet connection (EC) for which several user-to-network interfaces (UNIs) are attached (often with multiplexed access) over a shared server layer to a common UNI.

NOTE – Ethernet virtual private LAN service is referred to in [b-ITU-T G.8011.3].

3.29 **ETH path**: The highest Ethernet layer network (ETH) maintenance entity group (MEG) level in a set of eight MEG levels.

NOTE – ETH path is referred to in [b-ITU-T G.8010].

3.30 **ETH section**: The lowest Ethernet layer network (ETH) maintenance entity group (MEG) level in a set of eight MEG levels.

NOTE – ETH section is referred to in [b-ITU-T G.8010].

3.31 **ETH tandem connection**: An intermediate Ethernet layer network (ETH) maintenance entity group (MEG) level in a set of eight MEG levels.

NOTE – ETH tandem connection is referred to in [b-ITU-T G.8010].

3.32 **Ety-NNI**: An NNI for the transfer of Ethernet MAC characteristic information (ETH_CI) traffic units over a physical Ethernet interface.

NOTE – Ety-NNI is referred to in [b-ITU-T G.8012].

3.33 **Ety-UNI**: An Ethernet user-to-network interface (UNI) for the transfer of Ethernet MAC characteristic information (ETH_CI) traffic units over a physical Ethernet interface.

NOTE – Ety-UNI is referred to in [b-ITU-T G.8012].

3.34 **EVPLAN type 1**: A multipoint-to-multipoint service over multiplexed access with EP-LAN.

NOTE – EVPLAN type 1 is referred to in [b-ITU-T G.8011.3].

3.35 **EVPLAN type 2**: A multipoint-to-multipoint service over dedicated access and a shared server layer.

NOTE – EVPLAN type 2 is referred to in [b-ITU-T G.8011.3].

3.36 **EVPLAN type 3**: A multipoint-to-multipoint service over multiplexed access and a shared server layer.

NOTE – EVPLAN type 3 is referred to in [b-ITU-T G.8011.3].

3.37 **EVPL type 1**: An Ethernet virtual private line (EVPL) over multiplexed access and dedicated CO-CS and CO-PS (this is also recognized as multiplexed access EPL).

NOTE – EVPL type 1 is referred to in [b-ITU-T G.8011.2].

3.38   EVPL type 2: An Ethernet virtual private line (EVPL) over shared CO-CS, CO-PS and CL-PS.

NOTE – EVPL type 2 is referred to in [b-ITU-T G.8011.2].

3.39   EVPL type 3: An Ethernet virtual private line (EVPL) over multiplexed access and shared CO-CS, CO-PS and CL-PS.

NOTE – EVPL type 3 is referred to in [b-ITU-T G.8011.2].

3.40   EVPRM type 1: An Ethernet virtual private rooted multipoint (EVPRM) service over multiplexed access (root or leaf) and a dedicated server layer.

NOTE – EVPRM type 1 is referred to in [b-ITU-T G.8011.4].

3.41   EVPRM type 2: An Ethernet virtual private rooted multipoint (EVPRM) service over a shared server layer.

NOTE – EVPRM type 2 is referred to in [b-ITU-T G.8011.4].

3.42   EVPRM type 3: An Ethernet virtual private rooted multipoint (EVPRM) service over multiplexed access (root or leaf) and shared server layer.

NOTE – EVPRM type 3 is referred to in [b-ITU-T G.8011.4].

3.43   interconnection node: An Ethernet ring node which is common to two or more Ethernet rings or to a sub-ring and an interconnected network. At each interconnection node, there may be one or more Ethernet rings that can be accessed through a single ring port and not more than one Ethernet ring that is accessed by two ring ports. The former set of Ethernet rings is comprised of sub-rings, whereas the latter Ethernet ring is considered a major ring, relative to this interconnection node. If the interconnection node is used to connect a (set of) sub-ring(s) to another network, then there is no Ethernet ring accessed by two ring ports.

NOTE – Interconnection node is referred to in [b-ITU-T G.8032].

3.44   in-profile: For frames that belong to the same instance of an Ethernet service and priority, in-profile frames are defined as frames for which priority corresponds to a common value <X> and the network has determined that drop-eligibility corresponds to <false>. Procedures to determine drop-eligibility for a frame and procedures to convey priority and drop-eligibility on a frame are network- and service-specific.

NOTE – In-profile is referred to in [b-ITU-T G.8013].

3.45   in-service OAM: In-service operations, administration and maintenance (OAM) is a term that refers to OAM actions that are carried out while data traffic is uninterrupted, with the expectation that data traffic remains transparent to OAM actions.

NOTE – In-service OAM is referred to in [b-ITU-T G.8013].

3.46   leaf group: A leaf group represents two or more leaf ports within a rooted-multipoint (RMP) Ethernet connection (EC) which can transmit to, and receive from, other leaves in the leaf group. Leaf ports within a leaf group cannot transmit to, or receive from, leaves outside the group.

NOTE – Leaf group is referred to in [b-ITU-T G.8012.1].

3.47   link Ethernet connection: An Ethernet connection whose traffic units are either not encapsulated or encapsulated with a priority tag.

NOTE – Link Ethernet connection is referred to in [b-ITU-T G.8012.1].

3.48   maintenance entity (ME): The entity between two of the flow/connection points in a maintenance entity group (MEG).

NOTE – ME is referred to in [b-ITU-T G.8010].

3.49   maintenance entity group (MEG): A maintenance entity group is defined, for the purpose of fragment/connection monitoring, between a set of flow/connection points within a

fragment/connection. This set of flow/connection points may be located at the boundary of one administrative domain or a protection domain, or the boundaries of two adjacent administrative domains. The maintenance entity group consists of one or more maintenance entities.

NOTE – MEG is referred to in [b-ITU-T G.8010].

3.50   **maintenance entity group end point (MEP) compound sink function**: A compound transport processing function which accepts the characteristic information of the layer network at its input, extracts and processes the operations, administration and maintenance (OAM) information related to the maintenance entity group's monitoring, filters the OAM information from within to the maintenance entity group, adapts the information and presents it as the characteristic information of the layer or a client layer at its output, potentially as a (client) layer maintenance signal (e.g., AIS).

NOTE – MEG end point (MEP) compound sink function is referred to in [b-ITU-T G.8010].

3.51   **maintenance entity group end point (MEP) compound source function**: A compound transport processing function which accepts the characteristic information of the layer or a client layer network at its input, adapts that information, filters it for operations, administration and maintenance (OAM) information interfering with its own OAM information, adds OAM information to allow the maintenance entity group to be monitored and presents the resulting information at its output.

NOTE – MEG end point (MEP) compound source function is referred to in [b-ITU-T G.8010].

3.52   **maintenance entity group intermediate point (MIP) compound function**: A compound transport processing function which accepts the characteristic information of the layer network at its input, reacts to operations, administration and maintenance (OAM) information related to maintenance entity group's on-demand monitoring and presents the characteristic information without the OAM it reacted to at its output.

NOTE – MEG intermediate point MIP compound function is referred to in [b-ITU-T G.8010].

3.53   **major ring**: The Ethernet ring that is connected on two ports to an interconnection node.

NOTE – Major ring is referred to in [b-ITU-T G.8032].

3.54   **MEG end point (MEP)**: MEG end point (MEP) marks the end point of an ETH MEG which is capable of initiating and terminating operations, administration and maintenance (OAM) frames for fault management and performance monitoring. A MEP does not add a new forwarding identifier to the transit ETH flows. A MEP does not terminate the transit ETH flows, though it can observe these flows (e.g., count frames).

NOTE – MEG end point (MEP) is referred to in [b-ITU-T G.8013].

3.55   **MEG intermediate point (MIP)**: MEG intermediate point (MIP) is an intermediate point in a MEG which is capable of reacting to some operations, administration and maintenance (OAM) frames. A MIP does not initiate OAM frames. A MIP takes no action on the transit ETH flows.

NOTE – MEG end point (MIP) is referred to in [b-ITU-T G.8013].

3.56   **network termination**: The network element (NE) in the transport network, which is connected to the customer edge equipment.

NOTE – Network termination is referred to in [b-ITU-T G.8012].

3.57   **network-to-network interface (NNI)**: An interface that is used for the interconnection of networks elements within a transport network.

NOTE – Network-to-network interface (NNI) is referred to in [b-ITU-T G.8012].

3.58   **on-demand monitoring**: A method to infer a specific status or performance characteristic of a maintenance entity or a set of maintenance entities within a maintenance entity group at a specific point in time with the purpose to obtain a snapshot of the performance or to diagnose an identified fault condition or performance degradation.

NOTE – On-demand monitoring is referred to in [b-ITU-T G.8010].

3.59   on-demand OAM: On-demand OAM refers to OAM actions which are initiated via manual intervention for a limited time to carry out diagnostics. On-demand OAM can result in singular or periodic OAM actions during the diagnostics time interval.

NOTE – On-demand OAM is referred to in [b-ITU-T G.8013].

3.60   out-of-service OAM: Out-of-service operations, administration and maintenance (OAM) refers to OAM actions which are carried out while the data traffic is interrupted.

NOTE – Out-of-service OAM is referred to in [b-ITU-T G.8013].

3.61   proactive monitoring: A method to continuously observe the status and performance of a maintenance entity group (MEG) with the purpose of detecting disturbances, faults and degradations immediately after their occurrence in order to verify the service level agreement and/or initiate recovery actions to restore the service to the guaranteed level.

NOTE – Proactive monitoring is referred to in [b-ITU-T G.8010].

3.62   proactive OAM: Proactive operations, administration and maintenance (OAM) refers to OAM actions which are carried out continuously to permit proactive reporting of fault and/or performance results.

NOTE – Proactive OAM is referred to in [b-ITU-T G.8013].

3.63   R-APS virtual channel: The ring automatic protection switching (R-APS) channel connection between two interconnection nodes of a sub-ring in (an)other Ethernet ring(s) or network(s). Its connection characteristics (e.g., path, performance, etc.) are influenced by the characteristics of the network (e.g., Ethernet ring) providing connectivity between the interconnection nodes.

NOTE – R-APS virtual channel is referred to in [b-ITU-T G.8032].

3.64   ring MEL: The maintenance entity group (MEG) level providing a communication channel for ring automatic protection switching (R-APS) information.

NOTE – Ring MEG level (MEL) is referred to in [b-ITU-T G.8032].

3.65   ring protection link (RPL): The ring link that under normal conditions, i.e., without any failure or request, is blocked (at one or both ends) for traffic channel, to prevent the formation of loops.

NOTE – Ring protection link (RPL) is referred to in [b-ITU-T G.8032].

3.66   RPL neighbour node: When configured, an Ethernet ring node adjacent to the ring protection link (RPL) that is responsible for blocking its end of the RPL under normal conditions (i.e., the ring is established and no requests are present in the ring) in addition to the block by the RPL owner node. However, it is not responsible for activating the reversion behaviour.

NOTE – Ring protection link (RPL) neighbour node is referred to in [b-ITU-T G.8032].

3.67   RPL owner node: An Ethernet ring node adjacent to the ring protection link (RPL) that is responsible for blocking its end of the RPL under normal conditions (i.e., the ring is established and no requests are present in the ring). Furthermore, it is responsible for activating reversion behaviour from protected or manual switch/forced switch (MS/FS) conditions.

NOTE – Ring protection link (RPL) owner node is referred to in [b-ITU-T G.8032].

3.68   server MEP: A server MEP represents the compound function of the server layer termination function and the server/ETH adaptation function. It is used to notify the ETH layer MEPs upon failure detection by the server layer termination function or the server/ETH adaptation function, where the server layer termination function is expected to run operations, administration and maintenance (OAM) mechanisms specific to the server layer.

NOTE – Server MEP is referred to in [b-ITU-T G.8013].

3.69 **service Ethernet connection**: An Ethernet connection whose traffic units are encapsulated with a service VLAN tag (S-Tag) when they are transported through an Ethernet link. Outside an Ethernet link (Note 2) the traffic units are without a service VLAN tag; the information transported in the service VLAN tag is presented as a set of parameters: priority, drop eligible and EC identifier. The link end performs the mapping of these parameters into the service VLAN tag and the demapping of these parameters from the service VLAN tag.

NOTE 1 – Service Ethernet connection is referred to in [b-ITU-T G.8012.1].

NOTE 2 – The term 'Ethernet link' refers to the ETH link topological component defined in [ITU-T G.8010].

3.70 **sub-ring**: An Ethernet ring which is connected to (an)other Ethernet ring(s) or network(s) through the use of a pair of interconnection nodes. On their own, the sub-ring links do not form a closed loop. A closed connection of traffic may be formed by the sub-ring links and one or more links, which are controlled by (an)other Ethernet ring(s) or network(s), between interconnection nodes.

NOTE – Sub-ring is referred to in [b-ITU-T G.8032].

3.71 **sub-ring link**: A span (e.g., link/port) connecting adjacent sub-ring nodes that are under the control of the Ethernet ring protocol control process (ERP control process) of the sub-ring.

NOTE – Sub-ring link is referred to in [b-ITU-T G.8032].

3.72 **traffic conditioning function**: A "transport processing function" which accepts the characteristic information of the layer network at its input, classifies the traffic units according to configured rules, meters each traffic unit within its class to determine its eligibility, polices non-conformant traffic units and presents the remaining traffic units at its output as characteristic information of the layer network.

NOTE – Traffic conditioning function is defined in [b-ITU-T G.8010].

3.73 **user-to-network interface (UNI)**: An interface that is used for the interconnection of customer equipment with a network element of the transport network.

NOTE – User-network interface is referred to in [b-ITU-T G.8012].

3.74 **wait to block timer**: A timer, which is employed by the RPL owner to delay reversion after a forced switch or manual switch has been cleared.

NOTE – Wait to block timer is referred to in [b-ITU-T G.8032].

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

CI   Characteristic Information

CL-PS   Connectionless Packet Switched

CO-CS   Connection-Oriented Circuit Switched

CO-PS   Connection-Oriented Packet Switched

EC   Ethernet Connection

EoT   Ethernet over Transport

EoT.MCC   EoT Management Control Channel

EoT.MN   EoT Management Network

EoT.MSN   EoT Management Subnetwork

EoT.NE   EoT Network Element

EPL   Ethernet Private Line

ERP	Ethernet Ring Protection
ETH	Ethernet layer network
ETH_CI	Ethernet MAC Characteristic Information
ETHF_PP	Ethernet Flow Replication Point
Ety-NNI	Ethernet NNI
Ety-UNI	Ethernet UNI
EVC	Ethernet Virtual Connection
EVPL	Ethernet Virtual Private Line
EVPLAN	Ethernet Virtual Private LAN
EVPRM	Ethernet Virtual Private Rooted Multipoint
LAN	Local Area Network
MAC	Media Access Control
MCF	Message Communication Function
MEG	Maintenance Entity Group
MEL	MEG Level
MEP	MEG End Point
MIP	MEG Intermediate Point
MO	Managed Object
NEF	Network Element Function
NNI	Network Node Interface; Network-to-Network Interface
OAM	Operations, Administration and Maintenance
OSF	Operations System Function
PDU	Protocol Data Unit
R-APS	Ring Automatic Protection Switching
RMP	Rooted-Multipoint
RPL	Ring Protection Link
TMN	Telecommunications Management Network
UNI	User-to-Network Interface
VLAN	Virtual Local Area Network

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.8001/Y.1354, *Terms and definitions for Ethernet frames over transport*. 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.

Recommendation ITU-T	Latest version
ITU-T G.8010/Y.1306	02/2004 with Amd. 1, Err 1, Err 2, and Amd. 2
ITU-T G.8011/Y.1307	09/2012
ITU-T G.8011.1/Y.1307.1	01/2009
ITU-T G.8011.2/Y.1307.2	01/2009
ITU-T G.8011.3/Y.1307.3	02/2010
ITU-T G.8011.4/Y.1307.4	02/2010
ITU-T G.8012/Y.1308	05/2006 with Amd.1
ITU-T G.8012.1/Y.1308.1	09/2012
ITU-T G.8021/Y.1341	12/2011 with Amd. 1
ITU-T G.8032/Y.1344	03/2010 with Supplement
ITU-T G.8051/Y.1345	11/2009 with Amd. 1
ITU-T G.8013/Y.1731	02/2011

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[b-ITU-T G.805]   Recommendation ITU-T G.805 (2000), *General functional architecture of transport networks*.

[b-ITU-T G.808.1]   Recommendation ITU-T G.808.1 (2010), *Generic protection switching – Linear trail and subnetwork protection*.

[b-ITU-T G.809]   Recommendation ITU-T G.809 (2003), *Functional architecture of connectionless layer networks*.

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[b-ITU-T G.7710]   Recommendation ITU-T G.7710/Y.1701 (2012), *Common equipment management function requirements*.

[b-ITU-T G.7712]   Recommendation ITU-T G.7712/Y.1703 (2010), *Architecture and specification of data communication network*.

[b-ITU-T G.8010]   Recommendation ITU-T G.8010/Y.1306 (2004), *Architecture of Ethernet layer networks*, plus Amendment 1 (2006), Erratum 1 (2007), Erratum 2 (2007) and Amendment 2 (2010)

[b-ITU-T G.8011]   Recommendation ITU-T G.8011/Y.1307 (2012), *Ethernet service characteristics*.

[b-ITU-T G.8011.1] Recommendation ITU-T G.8011.1/Y.1307.1 (2009), *Ethernet private line service*.

[b-ITU-T G.8011.2] Recommendation ITU-T G.8011.2/Y.1307.2 (2009), *Ethernet virtual private line service*.

[b-ITU-T G.8011.3] Recommendation ITU-T G.8011.3/Y.1307.3 (2010), *Ethernet virtual private LAN service*.

[b-ITU-T G.8011.4] Recommendation ITU-T G.8011.4/Y.1307.4 (2010), *Ethernet virtual private rooted multipoint service*.

[b-ITU-T G.8012]   Recommendation ITU-T G.8012/Y.1308 (2004), *Ethernet UNI and Ethernet NNI*, plus Amendment 1 (2006).

[b-ITU-T G.8012.1] Recommendation ITU-T G.8012.1/Y.1308.1 (2012), *Interfaces for the Ethernet Transport Network*.

[b-ITU-T G.8013]   Recommendation ITU-T G.8013/Y.1731 (2011), *OAM functions and mechanisms for Ethernet based networks*.

[b-ITU-T G.8021]   Recommendation ITU-T G.8021/Y.1341 (2010), *Characteristics of Ethernet transport network equipment functional blocks*, plus Amendment 1 (2012).

[b-ITU-T G.8031]   Recommendation ITU-T G.8031/Y.1342 (2011), *Ethernet Linear Protection Switching*.

[b-ITU-T G.8032]   Recommendation ITU-T G.8032/Y.1344 (2012), *Ethernet ring protection switching*, plus Supplement (2012).

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[b-MEF 10.1]   The Metro Ethernet Forum (MEF) (2006), *Technical Specification MEF 10.1 – Ethernet Services Attributes Phase 2*.

GLOBAL INFORMATION INFRASTRUCTURE	
General	Y.100–Y.199
Services, applications and middleware	Y.200–Y.299
Network aspects	Y.300–Y.399
Interfaces and protocols	Y.400–Y.499
Numbering, addressing and naming	Y.500–Y.599
Operation, administration and maintenance	Y.600–Y.699
Security	Y.700–Y.799
Performances	Y.800–Y.899
INTERNET PROTOCOL ASPECTS	
General	Y.1000–Y.1099
Services and applications	Y.1100–Y.1199
Architecture, access, network capabilities and resource management	Y.1200–Y.1299
Transport	**Y.1300–Y.1399**
Interworking	Y.1400–Y.1499
Quality of service and network performance	Y.1500–Y.1599
Signalling	Y.1600–Y.1699
Operation, administration and maintenance	Y.1700–Y.1799
Charging	Y.1800–Y.1899
IPTV over NGN	Y.1900–Y.1999
NEXT GENERATION NETWORKS	
Frameworks and functional architecture models	Y.2000–Y.2099
Quality of Service and performance	Y.2100–Y.2199
Service aspects: Service capabilities and service architecture	Y.2200–Y.2249
Service aspects: Interoperability of services and networks in NGN	Y.2250–Y.2299
Numbering, naming and addressing	Y.2300–Y.2399
Network management	Y.2400–Y.2499
Network control architectures and protocols	Y.2500–Y.2599
Packet-based Networks	Y.2600–Y.2699
Security	Y.2700–Y.2799
Generalized mobility	Y.2800–Y.2899
Carrier grade open environment	Y.2900–Y.2999
FUTURE NETWORKS	Y.3000–Y.3499
CLOUD COMPUTING	Y.3500–Y.3999

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

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