



INTERNATIONAL TELECOMMUNICATION UNION

**TELECOMMUNICATION  
STANDARDIZATION SECTOR**

STUDY PERIOD 2017-2020

**SG15 – LS 19**

**Original: English**

**Question(s):** 9, 10, 14/15

Tokyo, Japan, 3-7 April 2017

**Ref.:** [TD24-WP3](#)

**Source:** ITU-T Study Group 15

**Title:** Liaison response to IEEE 802.1 and MEF incoming liaisons on MEF 38.1 and 39.1 (Reply to IEEE 802.1-LS33 (TD21/WP3) and MEF-oLS-107-MEF (TD18/WP3 and TD19/WP3))

**LIAISON STATEMENT**

**For action to:** IEEE 802.1, MEF Forum

**For comment to:** -

**For information to:** BBF, IETF Ops Area, ONF

**Approval:** ITU-T SG 15 Q9, 10, 14 interregnum meeting (Tokyo, Japan, 3-7 April 2017)

**Deadline:** 19 June 2017

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Thank you for your liaisons concerning proposed IEEE 802.1Q YANG modules for CFM, and proposed MEF revisions to MEF 38 (Service OAM Fault Management (FM) YANG Modules) and MEF 39 (Service OAM Performance Monitoring (PM) YANG Modules). ITU-T SG15 appreciates the long collaboration with IEEE 802.1 and MEF Forum on the topics of CFM, and Ethernet OAM FM and PM.

ITU-T Q14/15 believes that YANG modules should be developed within the organization that has responsibility for the corresponding data plane protocol (per OpCodes listed in Table 1). Accordingly, Q14/15 intends to progress YANG modules for the functions supported by the Ethernet OAM OpCodes assigned to ITU-T.

ITU-T Q10/15 and Q14/15 closely coordinate to assure consistency among data plane and associated management Recommendations (including G.8013/Y.1731, G.8052). Recommendation ITU-T

G.8052 “Protocol-neutral management information model for the Ethernet transport capable network element” supports the capabilities specified in G.8013/Y.1731 and G.8021/Y.1341, which were designed and are being maintained to maximize alignment with IEEE Std 802.1Q CFM. G.8052 provides an Eclipse Papyrus readable UML information model for Ethernet transport equipment. Q14/15 has ongoing work to enhance the G.8052 model by leveraging Recommendation ITU-T G.7711, and the ONF Core Information Model, Open Profile, UML and Papyrus guidelines work.

Q14/15 intends to generate YANG modules that support the ability to separate configuration from operational state. Q14/15 is interested in IEEE 802.1 and Q14/15 YANG modules providing as much independence as possible from the underlying data plane to allow applicability over the various transport networks that can support an Ethernet service.

Q14/15 intends to generate its YANG modules from the G.8052 information model using the open source EAGLE toolset. Upon generation of the Q14/15 YANG modules, comparison and alignment with the YANG modules for Ethernet OAM from IEEE 802.1 and MEF Forum can be addressed via mutual coordination and continued collaboration. It is our intention to ensure that these modules are aligned.

In support of the proposal from IEEE 802.1, we also look forward to continued industry collaboration as we together progress towards coherent specification development in this domain.

The next meeting of ITU-T SG15 is in Geneva, Switzerland, 19-30 June 2017.

**Table 1**

<b>OpCode value</b>	<b>OAM PDU type</b>
IEEE 802.1	
1	CCM
3	LBM
2	LBR
5	LTM
4	LTR
6	RFM
7	SFM
0, 8-31, 96-255	Reserved
ITU-T SG15	
32	GNM
32 -1	BNM
33	AIS
35	LCK
37	TST
39	Linear APS
40	Ring APS
41	MCC
41-1	EDM
43	LMM
42	LMR
45	1DM
47	DMM

<b>OpCode value</b>	<b>OAM PDU type</b>
46	DMR
49	EXM
48	EXR
51	VSM
50	VSR
52	CSF
53	1SL
55	SLM
54	SLR
34, 36, 38, 44, 60-63	Reserved
MEF	
56	LLR – Latching Loopback
57	LLM – Latching Loopback
58	SAT – Control Protocol
59	SAT – Control Message
IETF	
64	TRILL - Path Trace Reply
65	TRILL - Path Trace Message
66	TRILL - Multi-destination Tree Verification Reply
67	TRILL - Multi-destination Tree Verification Message
68-95	Reserved

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