**Title**: Liaison response to ITU-T SG15 LS362 and LS353

**From**: IEEE 802.1

**For**: Action

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**Date**: July 28, 2016

Thank you for your liaison COM 15 – LS 362, and for your liaison COM 15 – LS353 titled “Generation of YANG data model from UML” for the draft YANG data models that have been generated from the ITU‑T Information Models for Ethernet.

As we indicated in our November 2015 liaison response to ITU-T SG15 LS-292:

* It is the intent of IEEE 802.1 to fully specify the necessary objects as well as base functionality in IEEE 802.1 YANG data models.
* It would be a benefit to the industry to align towards a common base set that derivative YANG data models could augment as necessary.

Consequently, we recommended that when progressing the definition of YANG models in ITU‑T for Carrier Ethernet, that this work be done in close collaboration with IEEE 802.1 such that it is possible to reference (or augment) base objects and functionality from the YANG data models being defined by IEEE 802.1 (e.g., VLANs, 802.1Q bridging components, etc.).

We understand that such referencing or augmentation from the YANG data models being defined by IEEE 802.1 in the YANG data models being generated by ITU-T Q14/15 is only possible once the IEEE 802.1-defined YANG data models are available. We would therefore like to continue collaboration by pointing you to the GitHub repository where the YANG data models for our two active projects related to YANG modeling are publicly available (<https://github.com/YangModels/yang/tree/master/standard/ieee>), as well as sharing the UML diagrams used within these two ongoing projects:

* P802.1Xck: Standard for Local and metropolitan area networks ⎯ Port-Based Network Access Control Amendment: YANG Data Model
* P802.1Qcp: Standard for Local and metropolitan area networks ⎯ Bridges and Bridged Networks Amendment: YANG Data Model

Within these projects, we use UML diagrams primarily as a means to communicate data relationships to the reader. In addition, we have as an objective to represent the UML representations of the entity being modeled on a single page. In general, the UML diagrams align with OMG UML 2.5 specifications. However, we have extended the representations with additional notations to facilitate readability, which is our primary objective. For example, for each data attribute, we include a read-write or read-only indication along with a specification reference supporting the attribute.

The UML diagrams supporting the P802.1Qcp and P802.1Xck projects support the general modeled entity structure, illustrated in Figure 1:

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Figure 1: Structure

The UML diagrams are attached, and were created using a Visio editor.



We would request that UML diagrams be shared with your group via a password-protected file server in order to protect IEEE's copyright.

IEEE 802.1 face-to-face meetings remaining in 2016 will be held 12-15 September in York, United Kingdom, and 7-10 November in San Antonio, Texas, USA. We look forward to continued interaction between our organizations.