



IEEE 802.3 Ethernet Working Group
Liaison Communication

July 17, 2008

From: IEEE 802.3 Ethernet Working Group

To: Yoichi Maeda, Chair of ITU-T SG15 (yoichi.maeda@ntt-at.co.jp)

Members ITU-T Question 2/15

Cc: Paul Nikolich; Chair, IEEE 802 (p.nikolich@ieee.org)

David Law, Chair, IEEE 802.3 (david_law@ieee.org)

Adam Healy; Secretary, IEEE 802.3 (adam.healy@lsi.com)

Subject: Liaison letter ITU-T SG15 to IEEE 802.3 LS 1

Action: Response / Information

Dear Mr. Maeda and members of ITU-T SG15:

The 802.3 ~~working-Working group-Group~~ thanks SG15 for their liaison regarding the proposed interworking of ITU next generation PON and 802.3av standards systems. The group supports the basic goal of having standards from the two groups work together in a harmonious way, with the 802.3 standard providing the necessary interfaces such that the ITU standards may provide extended functions that are beyond the scope of 802.3 while not modifying the base 802.3 standard.

Concerning the specific interfaces, we would like to note that 802.3 already provides ~~an-an~~ extensible interface to the OAM channel, as described in 802.3 ~~C~~elause 57.4.3.6. ~~A~~An organization specific OAMPDU is defined with a code of 0xFE. The message data field begins with the organizational unique identifier (OUI) of the relevant organization, and the remainder of the data field is defined by that organization. We note that ITU-T has already been allocated an IEEE OUI: 00-19-A7 (hex). Therefore, the mechanism is in place to address any extensions to the OAM channel.

In addition, the next revision of the standard is expected to provide an additional extension to the slow protocol channel, as described in Annex 57B. Here, an organization specific slow protocol sub-type is defined with a code 0x0A. The message contents begin with an OUI, and the remainder of the message contents are defined by the indicated organization.

To the specific request to extend the MPCP channel, the preferred approach is to follow the ~~same~~ precedent of the OAM channel. However, to make this even more generic and widely usable, the extension will be applied to the MAC control channel, as described in 802.3 ~~C~~elause 31. (MPCP is a subtype of MAC Control.) A new opcode (~~tentatively~~ 0xFF-FE) shall be defined that will indicate an organization specific MAC Control message. The payload will then consist of ~~one-or-more type-length value triplets, with the type being~~ the OUI of the defining organization, ~~the length is the size of the triplet, and the value being defined by the organization~~ and the organizationally defined contents. With this in place, it will be possible for ITU to define specific extensions to the MPCP channel. For your reference, we attach the two documents that contain the proposed text for this function. Please note that this material is only a proposal, and is subject to change by the working group.

We believe that with these ~~two-three~~ extensible message types in place, the necessary interfaces for the successful interworking of the ITU and IEEE standards will be in place. We look forward to continuing our dialog with SG15 on this and other matters. Our next plenary session meeting will

be in held in ~~Seoul~~ Dallas on the week of ~~Sep. 15th~~ Nov. 10th. Please note that this liaison represents the views of 802.3, and not necessarily those of the IEEE or the IEEE SA.

Formatted: Superscript