IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group[1]

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      ITU-T Q2/15 membership

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Subject: Liaison to SG-15 from IEEE 802.3

From: David Law, Chair, IEEE 802.3 Ethernet Working Group (David_Law@3Com.com)

Approval: Agreed to at IEEE 802.3 Plenary meeting, Vancouver, March 12, 2009

Dear Mr. Maeda and members of ITU-T Q2/15,

The IEEE 802.3 Working Group thanks SG-15 for their kind liaison regarding your work on the "G.gbe" point to point optical access system. We support the basic goal of having standards from the two groups coexist in a harmonious way.

As to your specific question regarding the usage of the OAM slow protocol channel, the IEEE 802.3 Working Group chartered an Ad-Hoc group to study this issue. This group considered the liaison, the draft G.gbe document, and the Email discussion that occurred on the subject. The conclusion of that discussion was that it was not appropriate to classify organizational specific PDUs as link critical. Therefore, if the "10-frames-per-second" limit is of concern, then neither the OAM nor the slow-protocol organizational specific extension messages are suitable for the encapsulation of OMCI messages.

There seem to be two other possible ways to carry OMCI messages. The first is to use the MAC-Control organizational specific extension (currently part of the IEEE P802.3av/D3.0 draft). The second is to use the OUI extended Ethertype (defined in 802a<*WG chair to enter a complete title*>). Both of these use the same basic concept of defining a PDU format that is extensible by the organization that is identified by the OUI. The MAC-control channel extension is link-local and is typically used for functions that are tightly coupled to the MAC operation, while the Ethertype extension could be transported across bridges and is treated the same as user data.

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[1] This document solely represents the views of the IEEE 802.3 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

In case, you are interested in using extension MAC Control mechanism, the IEEE 802.3av/D3.0 draft is attached for your reference. In case that using 802a *<insert full title here>* is preferred, please consult the IEEE 802.1 working group.

We understand the importance of timely communication between the two groups and will make every effort to facilitate this. We also request that ITU-T SG-15 continue to keep the IEEE 802.3 Working Group advised as to the progress of its work related to IEEE optical access systems.

Sincerely,

David J. Law
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