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LIAISON STATEMENT

Source: ITU-T Study Group 15 (Geneva, 1-12 December 2008)

Title: LS to IEEE 802.3 Working Group: Slow protocols question on a 1Gbit/s point-to-point Ethernet-based optical access system

LIAISON STATEMENT

For action to:

For comment to: IEEE 802.3 Working Group

For information to:

Approval: Agreed to at SG15 meeting

Deadline: April 2009

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Dear Mr. Law and members of the IEEE 802.3 working group

ITU-T Q2/15 thanks the IEEE 802.3 working group for their understanding on the work on ITU-T Recommendation G.gbe, 1-Gbit/s point-to-point Ethernet-based optical access system.

We are pleased to communicate with the IEEE 802.3 working group as to the progress of the work. There are 4 main issues to be specified in this Recommendation. They are shown as follows with their progress.

- Physical layer specification
  most of the issues were agreed.
- OAM specification

the number of agreed items has been increasing, but some items are left to be discussed further, as mentioned below.

- Silent start function of ONT
  all of the issues were agreed.
- Power saving function
  no discussion was held so far.

On the issue of OAM specification, our basic approach is to implement a higher layer management channel based on the "ONU management and control interface (OMCI)" recommendations (G.984.4). The key issue here is how to carry the OMCI messages across the GbE link. Various alternatives have been considered, and the Slow Protocols channel was one possibility. However, we have identified a possible issue that requires clarification, explained as follows:

One of the functions of the OMCI channel is to carry alarms from the ONU to the OLT. Many of these alarms are time critical, and should be delivered as fast as possible. The first reading of the slow protocols channel suggests that there is a restriction of 10 frames per second, which may be limiting. But, on closer examination, we find that in the state diagram of the OAM Transmit mechanism (Fig.57-6 in clause 57.3.2.2.4), it seems that link critical events do not decrement the pdu_cnt variable, and therefore do not count against the 10 frames per second limit. If we could characterize our alarm messages as link critical events, then it seems that this potential issue is resolved. We would like to confirm the appropriateness of this characterization of alarms messages as critical link events.

We agreed to extend our target date for consent to the next SG15 meeting which will be held in September - October 2009, from the original target date of December 2008.

Please find the attached latest draft ITU-T Recommendation G.gbe version 2.0. Q2/15 appreciates further communication from the 802.3 working group if there are any comments or requests, and also any views on our slow protocols question. Our next interim meeting is scheduled on the week of May 4.

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