IEEE P1904.1 *SIEPON* Working Group
Standard for Service Interoperability in Ethernet Passive Optical Networks

Source: **IEEE P1904.1 SIEPON Working Group**[1]

To: Frank Effenberger, Rapporteur, ITU-T Q2 / SG15
feffenberger@huawei.com

From: Glen Kramer, Chair, IEEE P1904.1 SIEPON Working Group
glen.kramer@ieee.org

Subject: **OMCI for EPON Systems**

Approved at IEEE P1904.1 Working Group meeting, Tokyo, Japan, 27 October 2010

Dear Dr. Effenberger,

Thank you for your letter dated 3 September 2010, and for the attached copies of the G.987 and G.988 Recommendations and the documents describing the use of OMCI for the management of IEEE EPON systems; no doubt these will be useful during our deliberations. We would appreciate receiving new updates to the material as they become available.

We were very happy to learn that the ITU-T Q2/SG15 has informally accepted the Extended-OAM frame format for the transport of OMCI messages on IEEE EPON systems. As observed in the material attached to your latest letter, the Extended-OAM frame format is supported universally and is the best way to ensure backward and forward compatibility. We feel this outcome furnishes an excellent example of the close cooperation between our two groups and we look forward to a continued, strong relationship.

In this regard, we would like to share with you the outcome of a discussion at our meeting this week regarding the use of OMCI for the management of IEEE EPON systems. While there was agreement that this solution may be of great value to some network operators, we also recognized two issues that make progressing this work in SIEPON difficult. First, only a few OMCI authorities participate in SIEPON; in fact, all substantive work on this protocol is done by ITU-T Q2/SG15. Second, we feel there is a strong connection between the development of a management solution and the development of the associated interoperability tests, hence the limited representation of the OMCI community within SIEPON does not give us confidence that we could develop interoperability tests for OMCI-managed EPON systems in a timely fashion. Accordingly, we would like to propose that ITU-T Q2/SG15 consider the development of an OMCI-management solution for use with the SIEPON Package B feature set (the Package concept is described below) and a companion suite of test cases as part of your future work program.

The IEEE P1904.1 SIEPON specification will include requirements for VLAN configuration, security, authentication, protection, power savings, monitoring, QoS enforcement, management, and other features required for the full interoperability of IEEE EPON systems. At a high level, this standard will contain three distinct Packages of features. Each Package is being optimized for a particular deployment model, and within each Package there is a specification for each feature. We believe this formula removes uncertainty for implementers, simplifies the development of test cases, and fosters interoperability.

[1] This document solely represents the views of the IEEE P1904.1 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE Communications Society.

Our current schedule calls for the production of draft D1.1 by the end of this year. Provided the quality of the document allows it, we will forward a copy to ITU-T Q2/SG15 at that point. This should give you a much better understanding of our solution and hopefully aid you in your consideration of this suggested path forward.

We will keep you informed of any new and relevant developments as our work progresses, and we look forward to our next communication.

Very truly yours,

Glen Kramer, Chair, IEEE P1904.1 SIEPON Working Group (glen.kramer@ieee.org)