



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

Source: **IEEE P1904.1 SIEPON Working Group**<sup>1</sup>

To: David Law, Chair IEEE 802.3 Working Group  
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From: Glen Kramer, Chair, IEEE P1904.1 SIEPON Working Group  
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Subject: **Slow Protocol Frame Rate**

Approved at IEEE P1904.1 Working Group meeting, Busan, South Korea, 24 June 2010

Dear Mr. Law,

P1904.1 Working Group is developing system-level management solutions for EPON using the Organization Specific Extension mechanism defined in IEEE Std. 802.3, Clause 57, which uses the Slow Protocol channel. In the course of our work, concerns have been expressed regarding the Slow Protocol frame-rate limit, which may impose undesirable restrictions on ONU management capabilities in some operational scenarios. Identified concerns include the retrieval of large tables, software download, time-sensitive communications during fault conditions, and other cases which may require frame-rates well above 10 frames per second.

As you know, line rates and processor clock rates have both increased exponentially since the introduction of the current 10 frames per second limitation for Slow Protocol channels. Although P1904.1 Working Group recognizes the historical prudence of such a low limit, given the capabilities of the earliest solutions, we feel that commercial system capabilities are now well beyond this limit and that a revision of this specification is warranted.

P1904.1 respectfully requests that 802.3 Working Group relax or remove the current limit of 10 frames per second for Slow Protocol channels. Possible options that would meet our needs are:

- Removal of the 10 frames per second limit completely (preferred);
- Making the limit configurable;
- Making the limit discoverable during OAM discovery.

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<sup>1</sup> 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.



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Clearly, other solutions may exist and we would be happy to correspond with 802.3 on this topic if desired. The P1904.1 SIEPON Working Group looks forward to your help in resolving this issue.

Very truly yours,

Glen Kramer, Chair, IEEE P1904.1 *SIEPON* Working Group ([glen.kramer@ieee.org](mailto:glen.kramer@ieee.org))