IEEE 802.3 Ethernet Working Group
Liaison Communication

Source: IEEE 802.3 Working Group[1]

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Subject: Removal of plastic optical fiber from the next edition of ISO/IEC 11801

Approval: Agreed to at IEEE 802.3 interim meeting, Atlanta, GA, USA, 21st January 2016

Dear Dr. Oehler,

Thank you for your liaison 25N2458 regarding changes to ISO/IEC 11801.

We want to inform you of the status of our work with plastic optical fiber (POF) and the strong industry interest that has stimulated that work. You may be aware that IEEE P802.3bv Gigabit Ethernet over Plastic Optical Fiber (GEPOF) is a project to amend IEEE Std 802.3-2015. It will add gigabit per second operation over POF to the physical layer options included in IEEE Std 802.3-2015. The IEEE P802.3bv/D2.0 draft was approved to go to IEEE 802.3 Working Group ballot at this meeting, and we expect the ballot to open next week. Approval of our amendment is anticipated by March 2017.

There are three target markets for this amendment: home networking, automotive and industrial automation islands. We are aware that ISO/IEC 11801 addresses some of these markets.

Our port types for the three target markets are 1000BASE-RHA, 1000BASE-RHB and 1000BASE-RHC, collectively named 1000BASE-RHx. For home and industrial networking

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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.

applications IEEE P802.3bv specifies a 50 m fiber optic channel with up to one in-line connection in addition to the connections to the transceivers. All applications use IEC 60793-2-40 subcategory A4a.2, 1 mm cladding diameter, multimode, step index plastic optical fiber with a 650 nm wavelength light source.

The home channel allows use of non-terminated, duplex cable using a clamped connection at the transceiver. Industrial channels allow for a mated plug and receptacle connection at the transceiver. The home and industrial fiber optic channel is specified in terms of maximum insertion loss (9.5 dB without an in-line connection) and transfer function lower bound limits, under a specified modal power distribution using encircled angular flux methodology per IEC 61300-3-53.

The broad participation represented in our Task Force comes from many companies from Europe, Asia and North America. We would like to point your attention to our web site (http://www.ieee802.org/3/bv), where broad market potential was evaluated in the study group phase of IEEE P802.3bv work prior to the approval of the amendment project.

We are concerned about the total removal of POF from the latest draft of CD 11801; but also realize that the POF cable types that were removed do not include the A4a.2 POF we are using in IEEE P802.3bv. It would be ideal if we could reference ISO/IEC 11801 in the future.

We appreciate the long-term co-operation of ISO/IEC/JTC1/SC25/WG3 with IEEE 802.3 and are hopeful that continued co-operation will enable mutual development of appropriate specifications that support IEEE 802.3 1000BASE-RHx port types. Several of our GEPOF participants are willing to participate in SC25 through national bodies to help facilitate this.

Sincerely,

David Law
Chair, IEEE 802.3 Ethernet Working Group