

IEEE 802.3 Ethernet Working Group
EC REVIEW DRAFT Liaison Communication

Source: IEEE 802.3 Working Group¹

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Subject: Progress of IEEE P802.3ca as related to Wavelength selection, Power Budget, and FEC

Approval: Agreed to at IEEE 802.3 Plenary meeting, Rosemont, IL, USA, 8th March 2018

Dear Mr. Effenberger and Mr. Kani,

To support PON convergence efforts and maintain an open communication channel between ITU-T SG15 Q2 and on-going IEEE P802.3ca Task Force efforts we are providing a status of progress from the March 2018 Rosemont, IL, USA meeting.

The IEEE P802.3ca Task Force has approved the following elements associated with the standards effort:

1. Wavelength and Power Budget:

- Downstream wavelength plan was accepted. Two wavelengths: 1358 nm ± 2 nm and 1342 nm ± 2 nm. 25G PON will use 1358 nm ± 2 nm.
- 25G PON OLT transmitter launch power: AVPmin = 4.8 dBm and ER min = 8 dB.

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.

- 25G PON ONU receiver sensitivity was accepted: -25.7 dBm at BER = 1e-2 and ER = 8 dB.
 - Upstream wavelength plan was modified. UW0 1260 – 1280 nm, UW1 1290 – 1310 nm, UW2 1320 ± 2 nm.
 - 25G PON ONU transmitter launch power: (AVP minus TDP) min = 4 dBm, ER min = 5 dB.
 - 25G PON OLT receiver sensitivity was accepted: -25.0 dBm at BER = 1e-2, ER = 5 dB.
2. **Forward Error Correction (FEC):** Task Force has agreed to use LDPC in both directions with optional precoding in the downstream.
 3. **Task Force Draft 1.0:** The latest draft 1.0, a work in progress, is attached for your review. We request that this draft only be shared with your membership.

Once again, thank you for your interest. We look forward to continued collaboration with the ITU-T Q2/15 team.

Sincerely,
David Law
Chair, IEEE 802.3 Ethernet Working Group