

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 00 SC 0 P8 L4 # 25
 Lam, Cedric Google
 Comment Type E Comment Status D
 P802.3xx
 SuggestedRemedy
 replace with P802.3cs
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.1 P20 L29 # 16
 Lam, Cedric Google
 Comment Type E Comment Status D
 Change "first" to "last"
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.1 P19 L50 # 14
 Lam, Cedric Google
 Comment Type T Comment Status D
 We need to insert definition for DCM.
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.3.1.1 P21 L36 # 1
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '0.25 EQT'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.1 P20 L # 11
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 lack of overview section
 SuggestedRemedy
 An overview section will be provided
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.3.1.2 P21 L40 # 2
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.1 P20 L25 # 15
 Lam, Cedric Google
 Comment Type T Comment Status D
 We need to insert definition for FSR
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.3.1.2 P21 L44 # 3 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with 'The PMA defined in 200.3.4 continuously sends the appropriate stream of bits to the PMD for transmission on the medium, at a nominal signaling rate of 10.3125 GBd in the case of Super-PON OLT and symmetric Super-PON ONU PMDs or at a nominal signaling rate of 2.578125 GBd in the case of asymmetric Super-PON ONU PMDs. Upon receipt of this primitive, the PMD converts the specified stream of bits into the appropriate signals at the MDI.'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.3 P21 L48 # 4 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.3 P21 L52 # 5 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with 'The PMD continuously sends a stream of bits to the PMA defined in 200.3.4 corresponding to the signals received from the MDI, at the nominal signaling rate of 10.3125 GBd in the case of Super-PON ONU and symmetric Super-PON OLT PMDs or at the nominal signaling rate of 2.578125 GBd in the case of asymmetric Super-PON OLT PMDs.'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.4 P22 L3 # 6 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.4 P22 L4 # 7 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '142.2.5.4.3'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.4 P22 L5 # 8 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.2'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.3.1.4 P22 L9 # 9 [REDACTED]
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.3.1.5 P22 L20 # 10
 DeSanti, Claudio Dell Technologies
 Comment Type E Comment Status D
 unneded line break or lack of right justification
 SuggestedRemedy
 remove line break or justify line
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.6 P26 L37 # 53
 Du, Liang Amazon
 Comment Type E Comment Status D
 replace "turn on" with "laser on"
 SuggestedRemedy
 as suggested
 Proposed Response Response Status W
 PROPOSED REJECT.

Cl 200 SC 200.2.3.5.2 P23 L46 # 12
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.3.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.6.1 P26 L # 28
 Du, Liang Amazon
 Comment Type T Comment Status D
 Add rows on reflection and reflection tolerance. See presentation.
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.5.1 P25 L # 27
 Du, Liang Amazon
 Comment Type T Comment Status D
 Add reflection and reflection tolerance specs. See presentation.
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.7 P28 L14 # 29
 Du, Liang Amazon
 Comment Type T Comment Status D
 Minimum optical return loss at transmitter value
 SuggestedRemedy
 change to +42
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.5.1 P25 L25 # 26
 Du, Liang Amazon
 Comment Type T Comment Status D
 RIN15OMA value
 SuggestedRemedy
 Change "-120" to "-128". Align with 802.3av 10G standard.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.7 P28 L15 # 17
 Lam, Cedric Google
 Comment Type T Comment Status D
 maximum discrete reflectance value
 SuggestedRemedy
 propose -27
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.7 P28 L15 # 30
 Du, Liang Amazon
 Comment Type T Comment Status D
 maximum discrete reflectance
 SuggestedRemedy
 Add a note to say "over all wavelengths specified for FSR set 1 in table 200-4, including both C-band (upstream) and L-band (downstream)."
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.7 P28 L35 # 18
 Lam, Cedric Google
 Comment Type T Comment Status D
 maximum discrete reflectance value
 SuggestedRemedy
 propose -27
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.7 P28 L15 # 54
 Du, Liang Amazon
 Comment Type T Comment Status D
 maximum discrete reflectance
 SuggestedRemedy
 specify the value -26 dB
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.7 P28 L38 # 57
 Du, Liang Amazon
 Comment Type T Comment Status X
 maximum inter-channel crosstalk
 SuggestedRemedy
 change the value from 0.1 to -20
 Proposed Response Response Status O

Cl 200 SC 200.2.7 P28 L19 # 55
 Du, Liang Amazon
 Comment Type T Comment Status X
 maximum inter-channel crosstalk
 SuggestedRemedy
 change the value from 0.1 to -20
 Proposed Response Response Status O

Cl 200 SC 200.2.7 P28 L39 # 58
 Du, Liang Amazon
 Comment Type T Comment Status D
 Maximum optical path OSNR penalty
 SuggestedRemedy
 change the values from 1 to 1.1 and from 2 to 2.1
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.7 P28 L20 # 56
 Du, Liang Amazon
 Comment Type T Comment Status D
 Maximum optical path power penalty
 SuggestedRemedy
 change the value from 1 to 1.1
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.7 P28 L46 # 59
 Du, Liang Amazon
 Comment Type E Comment Status D
 definition sections have been added
 SuggestedRemedy
 remove paragraph
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.8 P28 L33 # 31
 Du, Liang Amazon
 Comment Type T Comment Status D
 Minimum optical return loss at transmitter value
 SuggestedRemedy
 change to +32
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8 P28 L34 # 32
 Du, Liang Amazon
 Comment Type T Comment Status D
 maximum discrete reflectance
 SuggestedRemedy
 Add a note to say "over all wavelengths specified for FSR set 1 in table 200-4, including both C-band (upstream) and L-band (downstream)."
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.8.1 P29 L10 # 13
 DeSanti, Claudio Dell Technologies
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 replace with '200.2.4'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.2 P29 L15 # 19
 Lam, Cedric Google
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy

replace with: The test patterns used in this clause shall be the same as those used for 100GBASE-LR4, as described in 88.8.1 and shown in Table 88–10, with the exception of Pattern 5. Table 88–11 shows the test patterns to be used in each measurement, unless otherwise specified, and also lists references to the subclauses in which each parameter is defined. A valid Super-PON signal is substituted for the 100GBASE-R signal specified in Table 88–11.

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.8.2 P29 L15 # 33
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>

SuggestedRemedy
 point to 75.7.3 (802.3av)

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.8.3 P29 L17 # 60
 Du, Liang Amazon
 Comment Type E Comment Status D
 Remove "and spectral width". We do not have spectral width as a parameter.

SuggestedRemedy

Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.8.3 P29 L19 # 61
 Du, Liang Amazon
 Comment Type E Comment Status D
 Remove "and spectral width (RMS)". We do not have spectral width as a parameter.
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.6 P29 L38 # 34
 Du, Liang Amazon
 Comment Type T Comment Status D
 OMA test
 SuggestedRemedy
 Do we need this section? We do not really use OMA in the standard.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.8.6 P29 L39 # 20
 Lam, Cedric Google
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'See 88.8.4.'
 Proposed Response Response Status O

Cl 200 SC 200.2.8.7 P29 L44 # 21
 Lam, Cedric Google
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'See 88.8.7, with exception of the optical return loss value of 15 dB.'
 Proposed Response Response Status O

Cl 200 SC 200.2.8.8 P29 L49 # 22
 Lam, Cedric Google
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'The required transmitter pulse shape characteristics for Super-PON PMDs are specified in the form of a mask of the transmitter eye diagram as shown in Figure 86-4 and the test method shall be according to 88.8.8.'
 Proposed Response Response Status O

Cl 200 SC 200.2.8.9 P30 L2 # 35
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 Replace with '52.9.10'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.9.1 P30 L7 # 36
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 Replace with 'As detailed in 52.9.10.1. Additionally, the optical signal generation shall include the use of a 50-GHz Gaussian optical filter or similar to emulate the wavelength selective ODN of Super-PON.'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.8.9.2 P30 L11 # 37
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 Replace with 'As defined in section 52.9.10.3'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.12 P30 L27 # 40
 Du, Liang Amazon
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'Jitter measurements for 10 Gb/s are described in 52.8.1.'
 Proposed Response Response Status O

Cl 200 SC 200.2.8.9.3 P30 L13 # 38
 Du, Liang Amazon
 Comment Type T Comment Status X
 Test procedure for what? This heading seems too general.
 SuggestedRemedy
 Proposed Response Response Status O

Cl 200 SC 200.2.8.13 P30 L31 # 41
 Du, Liang Amazon
 Comment Type T Comment Status D
 Incorrect Ton value
 SuggestedRemedy
 Ton value is <= 256 ns.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.11 P30 L23 # 39
 Du, Liang Amazon
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Remove this section.
 Add section for receiver OSNR tolerance.
 No definition in IEEE802.3-2018. Need to use ITU reference.
 Proposed Response Response Status O

Cl 200 SC 200.2.8.13.1 P30 L34 # 23
 Lam, Cedric Google
 Comment Type T Comment Status X
 Should we also include in the definition that the laser output wavelength is expected to settle within the excursion limit during laser Ton?
 SuggestedRemedy
 Proposed Response Response Status O

Cl 200 SC 200.2.8.13.2 P30 L51 # 24
 Lam, Cedric Google
 Comment Type T Comment Status X
 We should include the 50GHz filter as well?
 SuggestedRemedy
 Proposed Response Response Status O

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.8.14 P31 L37 # 42
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 Replace with '800 ns'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.17 P33 L54 # 45
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Maximum inter-channel crosstalk"
 As defined in the ITU-T specification T-REC-G.698.2-201811, section 7.3.8.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.15 P33 L54 # 43
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "200.2.8.15 maximum ripple"
 As defined in the ITU-T specification T-REC-G.698.2-2018, section 7.3.1. The Clear link passband shall be used instead of the maximum spectral excursion.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.18 P33 L54 # 46
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Maximum differential group delay"
 As defined in the ITU-T specification T-REC-G.698.2-201811, section 7.3.5.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.16 P33 L54 # 44
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Maximum and minimum residual chromatic dispersion"
 As defined in the ITU-T specification T-REC-G.698.2-201811, section 7.3.2.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.19 P33 L54 # 47
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Maximum optical path OSNR penalty"
 As defined in the ITU-T specification T-REC-G.698.2-201811, section 7.3.10.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.8.20 P33 L54 # 48
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Minimum optical return loss"
 As defined in the ITU-T specification T-REC-G.698.2-201811, section 7.3.3.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.22 P33 L54 # 51
 Du, Liang Amazon
 Comment Type T Comment Status X
 Insert new section
 SuggestedRemedy
 Section header: "Maximum power excursion"
 Maximum difference in optical insertion loss between all channels over upstream wavelengths
 Proposed Response Response Status O

Cl 200 SC 200.2.8.21 P33 L54 # 49
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Maximum spectral excursion"
 As defined in the ITU-T specification T-REC-G.689.2-201902, section 11.1.5.2.4.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.8.23 P33 L54 # 52
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "Burst-mode gain excursion"
 Maximum allowed change in gain/loss of the ODN in the upstream direction across all upstream traffic loads. The gain excursion specified should not be exceed if up to four channels on different wavelengths have perfectly aligned bursts. Since the channels are asynchronous, 4/16 channels being aligned is considered sufficiently low probability.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.8.21.1 P33 L54 # 50
 Du, Liang Amazon
 Comment Type T Comment Status D
 Insert new section
 SuggestedRemedy
 Section header: "measuring maximum spectral excursion"
 See contribution "measuring spectral excursion".
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Cl 200 SC 200.2.9.2 P34 L19 # 62
 Du, Liang Amazon
 Comment Type T Comment Status D
 Add: "The output (downstream direction) of the Mux/Amp will either be hazard level 2M or 3, depending on the configuration chosen by the operator. For deployments using class 3 lasers, fault detection with automatic power reduction is required. The power beyond the wavelength router in the ODN should always be class 1 hazard level."
 SuggestedRemedy
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

IEEE P802.3cs Super-PON Task Force 9th Task Force review comments

Cl 200 SC 200.2.9.4 P34 L28 # 63
 Du, Liang Amazon
 Comment Type T Comment Status D
 <<TBD>>
 SuggestedRemedy
 Replace with 'All active components, including the OLT, ONU, and Mux/Amp package (including all passive components) are expected to operate in a temperature controlled environment. Temperature is expected to be between 0-40 deg C; humidity is expected to be less than 80%.'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 200 SC 200.2.10.1 P34 L46 # 64
 Du, Liang Amazon
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'The fiber optic cabling can be assembled as the operator desires. However, the resulting ODN shall meet the requirements outlined in Tables 200-9 and 200-10.'
 Proposed Response Response Status O

Cl 200 SC 200.2.10.2 P34 L51 # 65
 Du, Liang Amazon
 Comment Type T Comment Status X
 <<TBD>>
 SuggestedRemedy
 Replace with 'The type of fiber used is at the discretion of the operator. All fiber types that support single-mode transmission across the wavelength range outlined in table 200-4 may be used. The resulting ODN shall meet the requirements outlined in Tables 200-9 and 200-10.'
 Some exemplary ODNs are shown in Appendix 200A.'
 Proposed Response Response Status O

Cl 200 SC 200.2.10.3 P35 L10 # 66
 Du, Liang Amazon
 Comment Type T Comment Status X
 Add "The number of optical fiber connections is not predefined. The resulting ODN shall meet the loss and reflectivity requirements described in Tables 200-9 and 200-10."
 SuggestedRemedy
 Proposed Response Response Status O