

IEEE 802.3dk D1.1 Bidirectional 100Gb/s Optical Access PHYs 2nd Task Force review comments

Cl 30 SC 30.51.1.2 P12 L # 1

Stassar, Peter Huawei

Comment Type TR Comment Status A

The syntax for 100GBASE-BRxx-y does not contain a reference to the bitrate.

SuggestedRemedy

Change the syntax along the lines of the syntax in dj D1.3 "200GBASE-R PCS/PMA over single-mode fiber PMD with a reach of up to at least 500 m as specified in Clause 180" or Table 157-2

Response Response Status C

ACCEPT IN PRINCIPLE.

Change the syntax to "100GBASE-R bi-directional OLT PHY over one single-mode fiber supporting a distance of at least 10 km as specified in Clause 168" with editorial license.

Cl 157 SC 157.4 P23 L23 # 2

Stassar, Peter Huawei

Comment Type TR Comment Status A

The reference to 80.4 is rather ambiguous. It would be better to specify separate delay constraints for the new 100G specifications

SuggestedRemedy

Create a new subclause 157.4.1 with delay constraints for 100GBASE-BRx, reusing the delay constraints in Clause 140.

Response Response Status C

ACCEPT IN PRINCIPLE.

Keep Clause 157 as it is and modify Table 80-7 in Clause 80.4 to include 100GBASE-BR10, 20, and 40 rows in the table.

The maximum (bit time), maximum (pause_quanta), maximum (ns) and notes of 100GBASE-BR10, 20 and 40 rows are the same as 100GBASE-LR1 PMD row.

Cl 168 SC 168.1 P25 L # 3

Stassar, Peter Huawei

Comment Type TR Comment Status A

This overview doesn't even call out that it are bidirectional interfaces such as described in 157.1.1. Also referring to "one medium" is not correct, because 3 mediums are defined, one for 10km, one for 20km and one for 40km.

SuggestedRemedy

Rewrite 168.1 to reflect that this is about bi-directional interfaces over 3 types of medium

Response Response Status C

ACCEPT IN PRINCIPLE.

Change the first sentence in overview to: "This clause specifies the 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 PMDs operating bidirectionally over 10km, 20km, and 40km on one single-mode fiber." with editorial license.

Cl 168 SC 168.5.1 P29 L # 4

Stassar, Peter Huawei

Comment Type TR Comment Status R

Figure 168-2 is confusing, because it shows TP2 and TP3 but also lambda 1 and lambda 2, suggesting that lambda 2 is from TP3 to TP2, which is not correct.

SuggestedRemedy

Add a note to the figure and associated text that the direction from TP2 to TP3 is only for one wavelength and that for the second wavelength the direction is opposite. Maybe introduce TP2/TP3 for Lambda 1 and TP2/TP3 for Lambda 2.

Response Response Status C

REJECT.

There is a note in Figure 168-2 that says: "For clarity, test points are shown for one direction of transmission only (left to right in this figure)", which explains the bidirectional lambda issue.

This figure is also found in clauses 158-160.

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Cl 168 SC 168.7.12 P40 L # 5

Stassar, Peter Huawei

Comment Type TR Comment Status A

This subclause uses SECQ as a parameter whereas it should TECQ in both Figuree and equations

SuggestedRemedy

Change the reference to SECQ to TECQ in related parts of 168.7.12

Response Response Status C

ACCEPT IN PRINCIPLE.
Change the "SECQ" in equation 168-4, 168-5, 168-6 and Figure 168-6 to "TECQ" with editorial license.

Cl 168 SC 168.7.5.2 P37 L28 # 6

Yu, Rang-chen InnoLight

Comment Type T Comment Status A

Fiber dispersion equation for 40km still follows the worst case which original ITU-T G.652 defined. It could be too tight for TDECQ spec measurement of 100G-BR-40.

SuggestedRemedy

Updating the dispersion equation of 40km option with statistical fitting coefficient (M=16) defined in Table I.4 of ITU-T G.652-202408.

Response Response Status C

ACCEPT IN PRINCIPLE.
Use 99.99% values for 10km, 20km, and 40km from slide 4 of https://www.ieee802.org/3/dk/public/2501/3dk_tan_2501_1.pdf with editorial license.