Cl **140** *SC* **140.6.1** *P* **41** *L* **51** # I-64

Dawe, Piers J G — Mellanox Technologies

Comment Type **TR** *Comment Status* **R** *specifications (updated 0929)*

The receiver must be protected from over-emphasised very bad signals as in all other optical PAM4 clauses, 400ZR and 100GBASE-ZR. Over/under-shoot and peak-to-peak power don't exclude all of these (but if you believe they do, the K limit won't hurt you).

SuggestedRemedy

Limit TDECQ - 10log10(Ceq) and TECQ - 10log10(Ceq) for 100GBASE-FR1 and 100GBASE-LR1 to 3.4 dB.
As there's now no need to generate such bad signals for Rx stress test or test the receiver against them, in Table 140-7 Conditions of stressed receiver sensitivity test, add limits for SECQ - 10log10(Ceq) (max) of 3.4 dB.
Remove the inserted wording in 140.7.5 and 5th item in list in 140.7.10.
Similarly for 400GBASE-FR4 400GBASE-LR4-6.

Response *Response Status* **U**

REJECT.

The comment is proposing values for parameters for that are not currently in Draft D3.0, for 100GBASE-FR1, 100GBASE-LR1, 400GBASE-FR4 and 400GBASE-LR4-6.

The IEEE P802.3cu Task Force reviewed these parameters previously during both task force review and working group ballot, and reached consensus to not include them.

While the comment does not request the addition of these parameters into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change.

Cl **140** *SC* **140.6.1** *P* **42** *L* **7** # I-65

Dawe, Piers J G — Mellanox Technologies

Comment Type **TR** *Comment Status* **R** *specifications (updated 0929)*

100GBASE-DR and 100GBASE-FR1 are interoperable. So the 100GBASE-FR1 transmitter must not transmit a worse signal than the 100GBASE-DR one.

SuggestedRemedy

Limit TECQ - 10log10(Ceq) for 100GBASE-FR1 to 3.4 dB.

Response *Response Status* **U**

REJECT.

The comment is proposing a value for a parameter that is not currently in Draft D3.0, for 100GBASE-FR1.

The IEEE P802.3cu Task Force reviewed this parameter previously during both task force review and working group ballot, and reached consensus to not include it.

While the comment does not request the addition of this parameter into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change.

Cl **140** *SC* **140.10a.1** *P* **59** *L* **12** # R1-12

Dawe, Piers J G — Mellanox Technologies

Comment Type **TR** *Comment Status* **R** *10LogCeq*

As pointed out in D3.0 comment 65, a 100GBASE-FR1 or 100GBASE-LR1 transmitter is allowed to transmit a bad signal that a 100GBASE-DR may not, and that a 100GBASE-DR receiver is not qualified for. This breaks interoperability. The K limit is missing, and the over/under-shoot, while useful, does not catch all bad transmitters that would fail the K limit. The response to comment 65 does not address the failure of interoperability, it only says that there was a previous decision to remove the K limit. Comment 65 and this one point out that that should be changed.

SuggestedRemedy

As interoperability with 100GBASE-DR applies over much shorter distances than the full distance for 100GBASE-FR1 or 100GBASE-LR1,
and as it is expected that decent transmitters will have no problem meeting the spec proposed below, and there is no extra measurement needed,
In Table 140-6, insert a limit of 3.4 dB for TECQ - 10log10(Ceq') (max), derived from TECQ in the same way that K = TDECQ - 10log10(Ceq) is derived from TDECQ

Response *Response Status* **U**

REJECT.

This comment is considered substantively similar to the previously rejected comment i-65.

The comment is again arguing that the over/under-shoot test, while useful, does not catch all bad transmitters that would fail a K limit (10LogCeq) test, and therefore leaves the potential for 100GBASE-FR1 and 100GBASE-LR1 transmitters that would not interoperate with a 100GBASE-DR receiver.

Note that the "TDECQ-10log10(Ceq)" parameter for 100GBASE-FR1 and 100GBASE-LR1 was removed in draft D2.0 and replaced with the over/under-shoot parameter.

The response to i-65 is shown here for reference:

"
REJECT.

The comment is proposing a value for a parameter that is not currently in Draft D3.0, for 100GBASE-FR1.

The IEEE P802.3cu Task Force reviewed this parameter previously during both task force review and working group ballot, and reached consensus to not include it.

While the comment does not request the addition of this parameter into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change."