

IEEE P802.3ct D2.1 100 Gb/s over DWDM systems 1st Working Group recirculation ballot comments

CI 152 SC 152.6 P72 L15 # 2067

Marris, Arthur Cadence Design Systems

Comment Type TR Comment Status R

Insert IFEC enable functionality that is currently specified in IEEE Draft P802.3ck/D1.2

SuggestedRemedy

Incorporate the 802.3ck modifications to 152.6 and 45.2.1.186aa in 802.3ct. Also make it so IFEC is enabled by setting the variable to one (not zero) "When the IFEC\_Enable variable is set to one, the Inverse RS-FEC sublayer performs the transmit function as specified in 152.5.2 and the receive function as specified in 152.5.3. When the variable is set to a zero, the transmit and receive functions are disabled, and the Inverse RS-FEC sublayer is bypassed,"

Response Response Status U

REJECT.  
P802.3ct is ahead of P802.3ck in the process, and will likely be approved first. In the context of P802.3ck, clause 152 IFEC would always be back-to-back with clause 161 interleaved FEC, and both sublayers would be enabled or disable as a pair. In the context of P802.3ct, there is no case where the Inverse RS-FEC sublayer can ever be (or ever needs to be) disabled, and in fact this would make no sense as this would feed the RS(544) format directly to the clause 153 SC-FEC sublayer. P802.3ck can add this configurability to the mechanism produced by P802.3ct when needed.

CI 153 SC 153.2.3.2.4 P83 L20 # 2031

Slavick, Jeff Broadcom

Comment Type TR Comment Status R

No Annex which provides a sample FEC frame is provided like 91A and 119A

SuggestedRemedy

Add an Annex that provides a sample SC-FEC frame

Response Response Status U

REJECT.  
Insufficient remedy proposed. Commenter is invited to submit proposed text for the type of Annex envisioned.  
A challenge is that the FEC codewords for RS(528,514) is 5280 bits, and for RS(544,514) are 5440 bits, whereas a FEC codeword for SC-FEC is 261120 bits, so it is less clear that a text sequence of numeric values for a full FEC codeword is meaningful or useful for the reader in the form of text in the published standard.  
While test vectors are known to exist for this FEC code, none are currently published in a place where they can be referenced.  
G.709.2, which is referenced, provides significant detail on the structure of the code, the way the block interleavers work, and the permutation factor tables.  
Commentor is invited to submit an alternate form eg a test vector file or code to generate the test vectors that can be published separate from this standard.

CI 154 SC 154.7.3 P111 L45 # 11

Dawe, Piers Nvidia

Comment Type TR Comment Status R

802.3 writes interoperability specifications. The definitions of transmitter, receiver and channel must each be independently complete enough so that any compliant transmitter, receiver and channel will interoperate. The transmitter and receiver have specified power ranges; the channel must have specifications that control the loss or gain for compliant transmitted signals so that the power window at TP3 is met. In G.698.2, 7.4.1 Maximum and minimum mean input power "This parameter (together with the maximum and minimum mean channel output power) also places a requirement on the maximum and minimum channel insertion loss (or gain) of the black link." Here, with the three pieces specified separately, channel loss/gain spec has got lost.

SuggestedRemedy

Add specifications to Table 154-10 so that a black link will deliver the right power at TP3. Different for amplified and non-amplified cases.

Response Response Status U

REJECT.

The commenter apparently disagrees with how the concept of a black link is specified in the draft. The requested power levels are shown in Table 154-9. Furthermore the proposed remedy does not contain a specific proposal to modify the draft in such a way that it would improve it on the basis of evidence provided.

There was no support that an issue has been demonstrated with the draft.

IEEE P802.3ct D2.1 100 Gb/s over DWDM systems 1st Working Group recirculation ballot comments

CI 154 SC 154.8.12 P114 L34 # 15

Dawe, Piers Nvidia  
 Comment Type TR Comment Status R

With regard to D2.0 comment 140, stressed sensitivity: two ways forward are: add a traditional WDM stressed sensitivity (extreme input power, chromatic dispersion, adjacent channel and SJ) with EVM and OSNR, or follow G.698.2 where extreme chromatic dispersion and OSNR, jitter are in separate specifications, while e.g. EVM are in both.

*SuggestedRemedy*

In 154.8.12, 154.8.13 and 154.8.16, write out clearly what impairments are included and what aren't; give an indication of how such a measurement could be done, with a block diagram. Include the appropriate SJ (see 121.8.9.4 for an example, but the parameters will be different here), but preferably with 5 or 6 spot frequencies instead of a mask (see Table 120E-6 for an example).

Response Response Status U

REJECT.  
 This is a similar comment as rejected comment #140 to D2.0. The response to previous comment stated "Furthermore the remedy does not contain a specific proposal to modify the draft in such a way that it would improve it on the basis of evidence provided. The commenter is invited to develop a detailed proposal for stressed receiver sensitivity. With evidence that adding such a requirement will improve the quality of the draft." The comment does not provide a specific proposal or provide evidence the suggested change will improve the quality of the draft.

CI 154 SC 154.8.16 P112 L46 # 20140

Dawe, Piers Nvidia  
 Comment Type TR Comment Status R

While G.698.2 gives the concept of receiver OSNR tolerance and says what's in and what's out, it is normal in Ethernet optical PMD specifications to have a more specific definition "Stressed receiver sensitivity" to avoid ambiguity and give an example of how one might actually assure that a receiver complies. I don't see why this PMD should not need it too. Writing the stressed receiver sensitivity section can be painful because it makes one clarify what one means - it's where the rubber hits the road.

*SuggestedRemedy*

Add a stressed receiver sensitivity section, following other clauses

Response Response Status U

REJECT.  
 The commenter has not demonstrated that the current specification is broken or incomplete and not demonstrated that adding a definition and specification of "stressed receiver sensitivity" would improve the quality of the draft.

Furthermore the remedy does not contain a specific proposal to modify the draft in such a way that it would improve it on the basis of evidence provided.

The commenter is invited to develop a detailed proposal for stressed receiver sensitivity with evidence that adding such a requirement will improve the quality of the draft.