Cl **153** *SC* **153.2.3.2.4** *P* **84** *L* **22** # 1

Marris, Arthur — Cadence Design Systems

Comment Type **TR** *Comment Status* **R**

This is a pile on to comment 2031. IEEE 802.3ct is an open standard allowing interoperation between equipment supplied by different vendors. It should provide sufficient detail to describe the FEC in a way to allow third party compliance testing. Requiring a sample FEC frame (or a reference to a publicly available one) to be included in the standard is perfectly reasonable. The fact that one cannot be provided is a matter of concern and a reason for the 802.3 working group not to allow progress to standards association balloting.

SuggestedRemedy

Provde a reference to a publicly available sample SC-FEC frame.

Response *Response Status* **U**

REJECT.

As the comment acknowledges, this comment is in support of an existing unsatisfied comment associated with a Disapprove vote that has already been rejected, responded to, and recirculated (Comment #2031 https://www.ieee802.org/3/ct/comments/D2P1/8023ct_D2p1_comments_final_unsatisfied_by_ID.pdf).

The proposed change by the commenter suggests providing a reference to a publicly available sample of the SC-FEC frame. However, as noted in the initial response to the unsatisfied comment - "While the test vectors are known to exist for the FEC code, none are currently published in a place where they can be referenced. G.709.2, which is referenced in the draft provides significant detail on the structure of the code, the way the block interleavers work, and the permutation factor tables."

The unsatisfied comment was circulated during the first and second recirculation ballots, and no other additional comments in support of the unsatisfied comment were made.

Cl **153** *SC* **153.2.3.2.4** *P* **83** *L* **20** # 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.

Cl **154** *SC* **154.7.3** *P* **111** *L* **45** # 2111

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.

Cl **154** *SC* **154.8.12** *P* **114** *L* **34** # 2115

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.

Cl **154** *SC* **154.8.16** *P* **112** *L* **46** # 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.