Cl **0**   *SC* **0**   *P*   *L*   # R2-13

Kramer, Glen   Broadcom Corporation
Comment Type   **T**   *Comment Status*   **X**

There are 12 distinct mandatory requirements in Subclause 158.8, but only a single PICS entry that says "Meets the specification defined in 158.8". This is not the way the requirements are expected to be summarized in PICS. Every requirement shall be a separate PICS entry.

SuggestedRemedy

Add a separate PICS entry for every "shall" statement in subclause 158.8.

Proposed Response   *Response Status*   **W**

1. To have a separate entry to every Shall is only a guideline
2. The format of this PICS entry follows Clause xyz
3. 158.8 specifies the test methods but not the actual PMD requirements. There was a shift of the wording in tests: required test vs. testing the requirement

---

Cl **0**   *SC* **0**   *P***1**   *L***1**   # R2-14

Kramer, Glen   Broadcom Corporation
Comment Type   **T**   *Comment Status*   **X**

Per 8.8.3 Instructions for completing the PICS proforma, each PICS entry corresponds to an item in the main body of a standard. This means that every instance of "shall" in text shall have a corresponding PICS entry with status "M" (mandatory). And every instance of "should" in text shall have a corresponding instance of PICS with status "O" (optional).

This draft has many more mandatory and optional requirement items in text than there are PICS.

SuggestedRemedy

Review the entire draft and do the following:

1) Remove all PICS entries that do not reference a specific single statement containing a word "shall" or "should" in the main body of the draft. For example, a broad PICS that says "Meets the specification defined in clause X" is not a valid PICS and it has to be removed.

2) Verify whether a sentence containing "shall" or "should" is really intended as a mandatory or an optional requirement. Note that the phrase "Care should be taken" (5 occurrences in D3.2) does not represent a properly formed optional requirement and thus shall not be used in the standard.

3) If it is determined that the "shall"/"should" are indeed intended to represent a mandatory/optional requirement, make sure there exists a separate PICS entry for each such requirement, with a precise reference to the item in the main body. If such entry does not exist, add one.

Proposed Response   *Response Status*   **W**

See R2-13, Reason 1

Cl **108**   *SC* **108.6.3**   *P***60**   *L***31**   # R2-1

Kramer, Glen   Broadcom Corporation
Comment Type   **T**   *Comment Status*   **X**

The text in question: "The RS-FEC sublayer may have capability to enable or disable the FEC function for some PHY types."

The text and the corresponding PICS don't match. The text has removed the requirement for both enable and disable capabilities, but the PICS entry "EF" has only removed the requirement for enable.

Also, not a good idea to leave the vague "for some PHYs" in the main body, and only specify that these PHYs are KR and CP in the PICS.

SuggestedRemedy

To match the PICS as written, the text shall say:
"The RS-FEC sublayer may have capability to enable and shall have capability to disable the FEC function for some PHYs (KR or CP)."

Proposed Response   *Response Status*   **W**

In the PICS, "Has the capability to disable the RS-FEC function" means the RS-FEC function is by default on, and for some PHYs (KR, CR) this function can be turned off. It doesn't mean it can only disable but not enable.

The mandatory vs optional of the RS-FEC is given in the original Clause 108.

Find why text in 108.6.3 was changed from shall to may (some PHYs)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Page, Line

Pa **60**
Li **31**

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Cl **158**   *SC* **158**   *P* **72**   *L* **1**   # R2-4

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **X**

This comment lists multiple instances of "should" in clause 158 that are missing their corresponding PICS with the status "O"

If the intention was not to introduce an optional requirement, rephrase the text such that "should" is not used.

SuggestedRemedy

Add PICS for the following text locations (Clause/Page/Line):
158.5.8/76/30
158.8.8/83/3
158.8.9.1/83/20
158.9.1.1/85/8 (x2)
158.9.1.1/85/13
158.9.1.1/85/14
158.9.1.1/85/16
158.9.1.1/85/18
158.9.1.1/85/26
158.9.1.3/86/11 (x2)
158.9.1.3/86/12
158.9.1.3/86/13
158.9.1.3/86/23
158.9.1.3/86/35
158.9.1.3/86/36
158.9.1.3/86/42
158.9.1.3/86/45
158.9.1.3/86/46
158.9.1.3/87/5
158.9.1.3/87/9
158.9.1.3/87/38
158.9.1.3/87/42
158.9.1.5/88/17
158.9.1.5/88/39

Proposed Response   *Response Status* **W**

Check Clause 52 PICS

Cl **158**   *SC* **158.1.1**   *P* **72**   *L* **43**   # R2-7

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **X**

Every statement that contains the word "shall" shall be represented by a separate PICS entry with status M (mandatory) or XX:M (conditional mandatory). The draft D3.2 does not maintain such alignment.

Subclause 158.1.1 contains 3 "shall" statements, but only one PICS

SuggestedRemedy

Add separate PICS entry for every shall.

Proposed Response   *Response Status* **W**

See R2-13, Reason 1.

Note: 10GBASE-BRx has two BER reference levels, this might be a merged PICS of these.

Cl **158**   *SC* **158.5.2**   *P* **74**   *L* **44**   # R2-8

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **X**

Missing PICS for "The higher optical power level shall correspond to tx_bit = ONE"

SuggestedRemedy

add missing PICS

Proposed Response   *Response Status* **W**

Check Cl.52

Cl **158**   *SC* **158.5.3**   *P* **74**   *L* **48**   # R2-9

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **X**

Missing PICS for "The higher optical power level shall correspond to rx_bit = ONE"

SuggestedRemedy

add missing PICS

Proposed Response   *Response Status* **O**

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Page, Line

Pa **74**
Li **48**

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Cl **158** *SC* **158.5.4** *P* **75** *L* **33** # R2-10

Kramer, Glen Broadcom Corporation

Comment Type **T** *Comment Status* **X**

Missing PICS for "The value of the SIGNAL_DETECT parameter shall be generated according to the conditions defined in Table 158–4."

SuggestedRemedy

add missing PICS

Proposed Response *Response Status* **O**

Cl **158** *SC* **158.5.4** *P* **75** *L* **37** # R2-2

Kramer, Glen Broadcom Corporation

Comment Type **T** *Comment Status* **X**

The text includes an optional requirement "should", but there is no corresponding "O" PICS

SuggestedRemedy

Add missing PICS or remove "should"

Proposed Response *Response Status* **O**

Cl **158** *SC* **158.5.6** *P* **76** *L* **11** # R2-11

Kramer, Glen Broadcom Corporation

Comment Type **T** *Comment Status* **X**

"PMDs compliant with this clause shall include the PMD_global_transmit_disable function which allows the optical transmitter to be disabled. When asserted, this function shall turn off the optical transmitter so that it meets the requirements of the average launch power of OFF transmitter in Table 158–6."

This text contains two distinct mandatory requirements, but there is only one PICS entry exists for this clause. It is not clear if that PICS entry applies to the first or to the second requirement.

SuggestedRemedy

Add two separate entries that are more specific to each "shall"

Proposed Response *Response Status* **O**

Cl **158** *SC* **158.5.6** *P* **76** *L* **27** # R2-3

Kramer, Glen Broadcom Corporation

Comment Type **T** *Comment Status* **X**

As a general rule, every instance of "shall" in text shall have a corresponding PICS There are two "shall" statements in 158.5.8, but only one PICS and that has an incorrect status The PICS shall be mandatory, conditional on MD.

SuggestedRemedy

Change PICS M2 to "MD:M". Add a new PICS for the "when asserted, this function *shall* turn off…"

Proposed Response *Response Status* **O**

Cl **158** *SC* **158.8** *P* **80** *L* **28** # R2-12

Kramer, Glen Broadcom Corporation

Comment Type **T** *Comment Status* **X**

"All optical measurements shall be made through a short patch cable, between 2 m and 5 m in length, unless otherwise specified."

This does not look like a requirement for a device being standardized.

SuggestedRemedy

Consider rephrasing without a "shall":

All optical measurements *are* made through a short patch cable, between 2 m and 5 m in length, unless otherwise specified."

Proposed Response *Response Status* **W**

See R2-13, Reason 3.
Find an existing example.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Page, Line

Pa **80**
Li **28**

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Cl **159**　　　*SC* **159**　　　　　　*P* **99**　　　*L* **1**　　　　# R2-5

Kramer, Glen　　　　　　　　　Broadcom Corporation

Comment Type　**T**　　　*Comment Status*　**X**

This comment lists multiple instances of "should" in clause 159 that are missing their corresponding PICS with the status "O"

If the intention was not to introduce an optional requirement, rephrase the text such that "should" is not used.

SuggestedRemedy

Add PICS for the following text locations (Clause/Page/Line):

159.7.9/109/49
159.7.10/110/19
159.7.10/110/32

Proposed Response　　　*Response Status*　**W**

See R2-13, Reason 3
Check Clause 114?

Cl **160**　　　*SC* **160**　　　　　　*P* **120**　　*L* **1**　　　　# R2-6

Kramer, Glen　　　　　　　　　Broadcom Corporation

Comment Type　**T**　　　*Comment Status*　**X**

This comment lists multiple instances of "should" in clause 160 that are missing their corresponding PICS with the status "O"

If the intention was not to introduce an optional requirement, rephrase the text such that "should" is not used.

SuggestedRemedy

Add PICS for the following text locations (Clause/Page/Line):

160.7.5.1/131/43
160.7.8/133/43
160.7.10/134/11
160.7.10/134/15
160.7.11/135/9
160.7.11.1/135/24
160.7.11.1/135/30
160.7.11.1/135/31
160.7.11.2/135/43
160.7.11.3/136/43
160.7.11.3/136/46 (x2)

Proposed Response　　　*Response Status*　**W**

Clause 139?

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Page, Line

Pa **120**
Li **1**

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