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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

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.

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, to have a separate entry to every shall is not a requirement. There are existing examples where multiple instances of shall are merged into a single PICS item. In 52.9, there are 12 instances of shall but only 9 PICS items are summarized. In 114.10, there is one shall but 2 PICS are summarized.

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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

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.

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, each PICS in IEEE P802.3cp draft contains: "A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in Clause 21." As a result, subclause 21.6.2 defines the abbreviations of M and O used in the status column: M-mandatory field/function, O-optional field/function. This means there isn't a one to one correspondance between M and O and "shall" and "should", respectively.

As far as "should" is concerned, there are many examples in the base std in which "should" doesn't have a PICS. In 52.9, there are more than 15 instances of should, but none of them have a PICS item. In 139.7.10, there are multiple instances of should, none of them have a PICS item.

There are 39 instances of "care should be taken" in IEEE Std 802.3 including its amendments. IEEE P802.3cp just reuses it.

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 **1**   Page 1 of 6
Li **1**   5/31/2021 8:24:04 PM

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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)."

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, in 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 is capable of being turned off. It doesn't mean it can only disable but not enable.

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, each PICS in IEEE P802.3cp draft contains: "A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in Clause 21." As a result, subclause 21.6.2 defines the abbreviations of M and O used in the status column: M-mandatory field/function, O-optional field/function. This means there isn't a one to one correspondance between M and O and "shall" and "should", respectively.

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 **72**
Li **1**

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5/31/2021 8:24:04 PM

As far as "should" is concerned, there are many examples in the base std in which "should" doesn't have a PICS. In 52.9, there are more than 15 instances of should, but none of them have a PICS item. In 139.7.10, there are multiple instances of should, none of them have a PICS item.

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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.

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, to have a separate entry to every shall is not a requirement. There are existing examples where multiple instances of shall are merged into a single PICS item. In 52.9, there are 12 instances of shall but only 9 PICS items are summarized. In 114.10, there is one shall but 2 PICS are summarized. In 140.1.1, there are two instances of shall on BER, in 140.11.4.1 (PICS) a single PICS item F3 is used to summarize them.

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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

SuggestedRemedy

add missing PICS

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, its PICS is F5 in 158.13.4.1. This follows the format of PICS in Clause 139.

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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

SuggestedRemedy

add missing PICS

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, its PICS is F8 in 158.13.4.1. This follows the format of PICS in Clause 139.

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

Kramer, Glen   Broadcom Corporation

Comment Type   **T**   *Comment Status*   **R**

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

Response   *Response Status*   **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, PICS items F9 and F10 both point to 158.5.4. This follows the PICS format of 139.5.4. The text in the comment field does not need to repeat requirements in the subclause.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Pa* **75**   Page 3 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *Li* **33**   5/31/2021 8:24:04 PM
SORT ORDER: Page, Line

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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

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

SuggestedRemedy

Add missing PICS or remove "should"

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, each PICS in IEEE P802.3cp draft contains: "A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in Clause 21." As a result, subclause 21.6.2 defines the abbreviations of M and O used in the status column: M-mandatory field/function, O-optional field/function. This means there isn't a one to one correspondance between M and O and "shall" and "should", respectively.

As far as "should" is concerned, there are many examples in the base std in which "should" doesn't have a PICS. In 52.9, there are more than 15 instances of should, but none of them have a PICS item. In 139.7.10, there are multiple instances of should, none of them have a PICS item.

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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

"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"

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, PICS item M2 in subclause 158.13.4.2 covers subclause 158.5.6. This is a single function description with two "shall". This follows the MD3 PICS item in subclause 52.1.5.3.2 and the M2 PICS item in subclause 139.11.4.2 in IEEE Std 802.3.

Also, to have a separate entry to every shall is not a requirement. There are existing examples where multiple instances of shall are merged into a single PICS item. In 52.9, there are 12 instances of shall but only 9 PICS items are summarized. In 114.10, there is one shall but 2 PICS are summarized.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Pa* **76**   Page 4 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *Li* **11**   5/31/2021 8:24:04 PM
SORT ORDER: Page, Line

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

Kramer, Glen　　　　　　　　　Broadcom Corporation

Comment Type **T**　　*Comment Status* **R**

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…"

Response　　　　　　*Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, PICS item M2 in subclause 158.13.4.2 covers subclause 158.5.6. This is a single function description with two "shall". This follows the MD3 PICS item in subclause 52.1.5.3.2 and the M2 PICS item in subclause 139.11.4.2 in IEEE Std 802.3.

Also, to have a separate entry to every shall is not a requirement. There are existing examples where multiple instances of shall are merged into a single PICS item. In 52.9, there are 12 instances of shall but only 9 PICS items are summarized. In 114.10, there is one shall but 2 PICS are summarized.

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

Kramer, Glen　　　　　　　　　Broadcom Corporation

Comment Type **T**　　*Comment Status* **R**

"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."

Response　　　　　　*Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, this is a common mandatory requirement of optical measurements to ensure accuracy. There are 19 examples of this sentence in the IEEE Std 802.3 including its amendments.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　*Pa* **80**　　Page 5 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　*Li* **28**　　5/31/2021 8:24:04 PM
SORT ORDER: Page, Line

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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

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

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, each PICS in IEEE P802.3cp draft contains: "A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in Clause 21." As a result, subclause 21.6.2 defines the abbreviations of M and O used in the status column: M-mandatory field/function, O-optional field/function. This means there isn't a one to one correspondance between M and O and "shall" and "should", respectively.

As far as "should" is concerned, there are many examples in the base std in which "should" doesn't have a PICS. In 52.9, there are more than 15 instances of should, but none of them have a PICS item. In 139.7.10, there are multiple instances of should, none of them have a PICS item.

Also, the text comes from subclauses 114.7.9 and 114.7.10 of IEEE Std 802.3. None of the "should" in these subclauses have PICS items.

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

Kramer, Glen   Broadcom Corporation

Comment Type **T**   *Comment Status* **R**

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)

Response   *Response Status* **C**

REJECT.

Comment is out of scope as it is not with respect to a changed portion of the last balloted draft nor any unsatisfied negative comment (as this ballot has 100% approval).

In addition, each PICS in IEEE P802.3cp draft contains: "A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in Clause 21." As a result, subclause 21.6.2 defines the abbreviations of M and O used in the status column: M-mandatory field/function, O-optional field/function. This means there isn't a one to one correspondance between M and O and "shall" and "should", respectively.

As far as "should" is concerned, there are many examples in the base std in which "should" doesn't have a PICS. In 52.9, there are more than 15 instances of should, but none of them have a PICS item. In 139.7.10, there are multiple instances of should, none of them have a PICS item.

Also, the text comes from subclause 139.7 of IEEE Std 802.3. None of the 11 "should" in this subclause have PICS items.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Pa* **120**   Page 6 of 6
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *Li* **1**   5/31/2021 8:24:04 PM
SORT ORDER: Page, Line