Cl **113** *SC* **113.7.1** *P* **175** *L* **36** # r02-6

Hajduczenia, Marek — Bright House Network

Comment Type **E** *Comment Status* **D**

Extra >>"<< in "ISO/IEC TR 11801-9905 ""Guidelines" text

SuggestedRemedy

Change "ISO/IEC TR 11801-9905 ""Guidelines" to "ISO/IEC TR 11801-9905 "Guidelines"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Duplicate by comment r02-7

Cl **113** *SC* **113.7.1** *P* **175** *L* **36** # r02-7

Maguire, Valerie — The Siemon Company

Comment Type **E** *Comment Status* **D** *EZ*

Extra quote marks.

SuggestedRemedy

Replace, ""Guidelines with "Guidelines

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Duplicate of comment r02-6

Cl **45** *SC* **45.2.3.6.1** *P* **42** *L* **32** # r02-8

Anslow, Peter — Ciena Corporation

Comment Type **E** *Comment Status* **D** *EZ*

The text "The PCS type abilities of the PCS are advertised in bits 3.8.9 and 3.8.6:0." is not correct as 802.3by uses bit 3.8.7.

SuggestedRemedy

Change to "The PCS type abilities of the PCS are advertised in bits 3.8.9 and 3.8.7:0."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113** *SC* **113.5.4.2** *P* **13** *L* **26** # r02-5

RAN, ADEE — Intel Corporation

Comment Type **T** *Comment Status* **D** *EZ*

Also applies to 113.5.3.5.

The text in these subclauses hasn't changed, but should have changed based on comment r01-9.

Symbol rate units are Baud, not Hz.

SuggestedRemedy

Change "MHz" to "MBd" in both places.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113** *SC* **113.3.2.3.3** *P* **12** *L* **2** # r02-4

RAN, ADEE Intel Corporation

Comment Type **T** *Comment Status* **D** *Invalid Blocks*

List item d can't be encountered by a receiver - the *GMII characters are decoded from the block format, not the other way around.

Items b and c seem be written as if they belong in a transmitter. The receiver test for control characters is much more detailed, as shown in the definition of R_BLOCK_TYPE. R_BLOCK_TYPE also covers item a.

The criteria in items a-d can be replaced by the simple condition "R_BLOCK_TYPE of the block is E".

SuggestedRemedy

Delete list item a-d.

Unless the handling of invalid blocks is changed here to "set R_BLOCK_TYPE to E" (subject of another comment):
add an item:
a) R_BLOCK_TYPE of the block is E.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
This comment is out of scope as the text is unchanged from prior circulations, and was merely moved.

Delete list item d:
d)The set of eight 25GMII/XLGMII characters does not have a corresponding block format in Figure 113–9, for 25GBASE-T, or Figure 113–10 for 40GBASE-T.

Rationale:
List items a, b, and c are unrelated to the move and can occur as the result of a (presumably rare) data error which might be undetected by other means.

However, list item d is related to the move itself, as the conversion from 25GMII/XLGMII characters to block formats only happens at the transmitter, and this text is now in the PCS receive subclause.

Cl **113** *SC* **113.3.2.3.3** *P* **117** *L* **52** # r02-3

RAN, ADEE Intel Corporation

Comment Type **E** *Comment Status* **D** *Invalid Blocks*

A compliant transmitter will never send blocks matching any of items a-d, since the T_BLOCK_TYPE calculation would return E which would result in EBLOCK_T being sent.

With FEC protecting all bits, it should be extremely rare that data corruption causes blocks to match any of these criteria without also causing parity check failure.

Therefore, the prevalent (if not sole) reason for marking blocks as invalid in the receiver is going to be FEC parity check failure (covered by item e and the last paragraph).

Restructuring this subclause may improve clarity.

SuggestedRemedy

Move the last paragraph (starting with "The PCS Receive function") to be the first paragraph in this subclause.

Re-order the list so that item e (starting with "The block contains the payload of an invalid received PHY frame") appears first.

Move the sentence "Invalid blocks are replaced by error" (or its replacement, subject to another comment) to the end of this subclause.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
This comment is out of scope as the text is unchanged from prior circulations, and was merely moved.

The text is correct, as is. While it may (or may not) be extremely rare, data corruption can occur, especially because decoding algorithms for LDPC are generally suboptimal, and subject to significant variation between implementations.

Cl **113** *SC* **113.3.2.3.3** *P* **118** *L* **7** # r02-2

RAN, ADEE Intel Corporation

Comment Type **T** *Comment Status* **D** *Invalid Blocks*

"The block contains the payload of an invalid received PHY frame"

The payload spans multiple blocks, so a block can't contain the payload.

SuggestedRemedy

Change item e from
"The block contains the payload of an invalid received PHY frame or the first 64B/65B block following an invalid received PHY frame"

to
"The block is part of the payload of an invalid received PHY frame, or is the first 64B/65B block following an invalid received PHY frame".

Proposed Response *Response Status* **W**

PROPOSED REJECT.
This comment is out of scope as the text is unchanged from prior circulations, and was merely moved.

The text is clear - "contains" does not necessarily mean "completely contains"

Cl **113** *SC* **113.3.2.3.3** *P* **117** *L* **52** # r02-1

RAN, ADEE Intel Corporation

Comment Type **T** *Comment Status* **D** *Invalid Blocks*

"Invalid blocks are replaced by error"

"Error" is defined in 113.3.2.2.14 (in the transmit function) as a character. An invalid block should be replaced by 8 error characters.

Also, it is not obvious that this definition applies to 113.3.2.3.3 (receive function) - it appears in a different area, 12 pages before this subclause..

Figure 113-20 already specifies that error blocks are decoded as EBLOCK_R, so it may be easiest to use that; invalid block should be assigned R_BLOCK_TYPE value E.

SuggestedRemedy

Change
"Invalid blocks are replaced by error"

to
"R_BLOCK_TYPE of invalid blocks is set to E"

or
"Invalid blocks are decoded as EBLOCK_R as shown by the PCS Receive state diagram (Figure 113-20)."

Proposed Response *Response Status* **W**

PROPOSED REJECT.
This comment is out of scope as the text is unchanged from prior circulations, and was merely moved.

Subclause 113.3.2.3.3 speaks informatively to the blocks, other subclauses, referenced by the commenter, provide the detailed mechanism for implementing the change. The text is clear and that detail would be out of place in this subclause.