The first box of Figure 156-7 consists of a coherent receiver and the second box consists of the frontend correction. Both boxes make a calibrated coherent receiver.

**Suggested Remedy**

Rename the first box of Figure 156-7 as "Coherent Receiver" instead of "Calibrated Coherent Receiver".

**Proposed Response**

Renamed as "Coherent Receiver".

**Comment Status**

X

**Response Status**

O

Requirements on the clock recovery unit should be included.

**Suggested Remedy**

Modify Figure 156-8 changing the second block as "Clock and Frequency Offset Recovery". Include at the beginning of subclause 156.10.1.2.2 the following text "A clock recovery with a corner frequency of TBD MHz and a slope of TBD dB/decade is applied on a fixed block length of TBD symbols."

Otherwise modify Figure 156-8 adding a block named "Clock Recovery" after the "Polarization Demux" block and add a new subclause (156.10.1.2.2) containing the following text "A clock recovery with a corner frequency of TBD MHz and a slope of TBD dB/decade is applied on a fixed block length of TBD symbols."

**Proposed Response**

Added new subclause.

**Comment Status**

X

**Response Status**

O

There is a mismatch between the title of subclause 156.10.1.2.1 and the corresponding block in Figure 156-8.

**Suggested Remedy**

Rename subclause 156.10.1.2.1 as "Polarization Demux"

**Proposed Response**

Renamed subclause.

**Comment Status**

X

**Response Status**

O
IEEE P802.3cw D1.2 400 Gb/s over DWDM systems 3rd Task Force review comments

<table>
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<td>Text says the 400GMII extender sublayers are shown in the figure, but the figure does not include them.</td>
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<td>SuggestedRemedy</td>
<td>Delete the second sentence of the first paragraph of 155.1.2, beginning with &quot;The sublayers of a 400GMII Extended Sublayer...&quot;</td>
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</table>
The sentence about rate matching not being necessary could be more clear. Rate matching as described in 119.2.4.1 has two purposes: making room for alignment markers, and aligning the two clock domains. It is not needed in 400GBASE-ZR both because the AMs are not inserted into the stream of transcoded blocks (they are instead part of the 400GBASE-ZR frame) and because GMP handles the clock domain transition.

**Suggested Remedy**
Modify the second sentence of the first paragraph to read: "The rate matching described in 119.2.4.1 is not required for the 400GBASE-ZR PCS because the transcoded block stream is mapped into a 400GBASE-ZR frame structure that includes space for alignment markers, and clock compensation between the two clock domains is provided by this mapping."

**Comment Status** X

**Response Status** O

---

The right-hand curly brace, two horizontal lines, and word 'Frame' on the right hand side of the figure don’t seem to add any clarity. The figure title is 400GBASE-ZR frame structure, and the text describes the structure clearly.

**Suggested Remedy**
Delete the right-hand curly brace, horizontal lines and 'Frame', leaving only the frame itself in the figure.

**Comment Status** X

**Response Status** O

---

The overhead in G.709.1 does not include the 'LDI' field described in 155.2.4.4.5; that is only in the 400ZR IA. As such the statement that the contents of the overhead are described in G.709.1 clauses 8.1 and 9.2 is not accurate.

**Suggested Remedy**
Since G.709.1 and the 400ZR IA have different descriptive techniques, and neither one uses the same bit numbering convention of 802.3, it may be more expedient to create a figure in P802.3cw that shows the structure of the first set of 320 bits rather than to try and reference either document. Revise the text to say: The overhead is organized into four sets of 320 bits that are interleaved in groups of 10 bits to form the 1280 bit field. The contents of the first 320 bits are as shown in Figure 155-X and described below. The contents of the second through fourth sets of 320 bits are all zeros.

**Comment Status** X

**Response Status** O
IEEE P802.3cw D1.2 400 Gb/s over DWDM systems 3rd Task Force review comments

Comment ID 18

Cl 155 SC 155.2.4.4.5 P 41 L 18 # 18
Huber, Tom Nokia

Comment Type T Comment Status X

More detail about the LDI field is needed. While it is generally better to cross-reference, and the intent is clearly to match the behavior in the 400ZR IA, the IA treats these bits as part of the STAT byte rather than a separate field, and it also refers back to am_sf<2:0> in its definition, so it would be better to describe how LDI<2:0> relates to tx_am_sf<2:0> directly. The text in the IA appears to align with the definitions of tx_am_sf<2:0> for PHY XS FEC Degrade signaling in 118.2.2 of 802.3 (the ‘extra processing’ in the IA seems to be described in this clause). The order of the bits in the Status byte is different than in tx_am_sf<2:0>.

SuggestedRemedy
Add the following text to paragraph 4:
The contents of LDI<2:0> are as follows:
LDI<2> corresponds to tx_am_sf<0> in 118.2.2. LDI<1> corresponds to tx_am_sf<2> in 118.2.2. LDI<0> corresponds to tx_am_sf<1> in 118.2.2.

Proposed Response Response Status O

Comment ID 19

Cl 155 SC 155.2.4.9 P 46 L 25 # 20
Huber, Tom Nokia

Comment Type E Comment Status X

The last 6 rows in the first column are shaded, presumably because they are the 6 blocks of padding, but the shading is not maintained in the other columns.

SuggestedRemedy
Remove the shading of the pad blocks and relabel the left-most column to just show 10976 blocks of 119b, as the details of which blocks are pad blocks are not really important to this figure.

Proposed Response Response Status O

Comment ID 20

Cl 155 SC 155.2.5.6 P 48 L 50 # 22
Huber, Tom Nokia

Comment Type E Comment Status X

The figure contains a mix of lighter and heavier horizontal lines. The heavier lines don't appear to mean anything.

SuggestedRemedy
Revise the figure to remove the heavy lines, or make clear what they mean if there is an intended meaning to them.

Proposed Response Response Status O

Comment ID 21

Cl 155 SC 155.2.4.10 P 46 L 38 # 21
Huber, Tom Nokia

Comment Type E Comment Status X

The figure contains a mix of lighter and heavier horizontal lines. The heavier lines don't appear to mean anything.

SuggestedRemedy
Revise the figure to remove the heavy lines, or make clear what they mean if there is an intended meaning to them.

Proposed Response Response Status O

Comment ID 22

Cl 155 SC 155.2.4.4 P 41 L 23 # 17
Huber, Tom Nokia

Comment Type E Comment Status X

155.2.4.4.4, 155.2.4.4.5, and 155.2.4.4.6 are all describing specific aspects of the 400GBASE-ZR overhead field. As such, it would probably be better if they were renumbered to be subclauses of 155.2.4.4.3.

SuggestedRemedy
Change the numbering to 155.2.4.4.3.1 through 155.2.4.4.3.3.

Proposed Response Response Status O
IEEE P802.3cw D1.2 400 Gb/s over DWDM systems 3rd Task Force review comments

**Proposed Response**

### Comment ID 23

**Cl 155**  SC 155.2.5.7  P49  L6  # 23

Huber, Tom  
Nokia  

**Comment Type**  E  
**Comment Status**  X  

There should be a hyphen in CRC32

**Suggested Remedy**

Change to CRC-32

**Proposed Response**

**Response Status**  O

---

### Comment ID 24

**Cl 155**  SC 155.2.5.7.2  P49  L48  # 24

Huber, Tom  
Nokia  

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

Additional detail about the LDI field and how it relates to tx_am_sf<2:0> in clause 118 is needed.

**Suggested Remedy**

Add a cross-reference to the description of the LDI bits in the Transmit clause (this is currently 155.2.4.4.5, but may be changed to 155.2.4.4.3.2 based on another comment)

**Proposed Response**

**Response Status**  O

---

### Comment ID 25

**Cl 156**  SC 156.9.20  P81  L32  # 25

Maniloff, Eric  
Ciena  

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

Optical Path Power penalty is not required for the defined application.

**Suggested Remedy**

Remove 156.9.20

**Proposed Response**

**Response Status**  O

---

### Comment ID 26

**Cl 156**  SC 156.8  P75  L41  # 26

Maniloff, Eric  
Ciena  

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

Interferometric crosstalk is not required to be specified for point-to-point applications.

**Suggested Remedy**

Remove Interferometric crosstalk from Table 156-8

**Proposed Response**

**Response Status**  O

---

### Comment ID 27

**Cl 156**  SC 156.7.2  P74  L23  # 27

Maniloff, Eric  
Ciena  

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

Receiver OSNR is only defined for average receive power ≥ -12 dBm

**Suggested Remedy**

Remove text "For average receive power < -12 dBm"

**Proposed Response**

**Response Status**  O

---

### Comment ID 28

**Cl 156**  SC 156.7.2  P74  L26  # 28

Maniloff, Eric  
Ciena  

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

Receiver OSNR tolerance is only defined for average receive power ≥ -12 dBm

**Suggested Remedy**

Remove text "For average receive power ≥ –12 dBm" from receiver OSNR tolerance

**Proposed Response**

**Response Status**  O

---

### Comment ID 29

**Cl 156**  SC 156.9.17  P81  L18  # 29

Maniloff, Eric  
Ciena  

**Comment Type**  E  
**Comment Status**  X  

Add table reference for Receiver OSNR tolerance

**Suggested Remedy**

Change "Receiver OSNR tolerance" to "The Receiver OSNR tolerance is specified in Table 156-7. Receiver OSNR tolerance is defined…"

**Proposed Response**

**Response Status**  O
IEEE P802.3cw D1.2 400 Gb/s over DWDM systems 3rd Task Force review comments

**Proposed Response**

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**Comment Type**

- E: Editorial required
- T: Technical required
- G: General required

**Comment Status**

- X: Accepted
- D: Dispatched
- R: Rejected

**Response Status**

- O: Open
- W: Written
- C: Closed
- Z: Withdrawn

THE 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 Z/withdrawn

SORT ORDER: Comment ID