# 142.5 Protocol implementation conformance statement (PICS) proforma for Clause 142, Physical Coding Sublayer and Physical Media Attachment for Nx25G-EPON<sup>2</sup>

### 142.5.1 Introduction

The supplier of a protocol implementation that is claimed to conform to Clause 142, Physical Coding Sublayer and Physical Media Attachment for Nx25G-EPON, shall complete the following protocol implementation conformance statement (PICS) proforma.

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.

#### 142.5.2 Identification

#### 142.5.2.1 Implementation identification

| Supplier <sup>1</sup>                                                                                                                                                                                                                                                                         |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Contact point for enquiries about the PICS <sup>1</sup>                                                                                                                                                                                                                                       |  |  |  |
| Implementation Name(s) and Version(s) <sup>1,3</sup>                                                                                                                                                                                                                                          |  |  |  |
| Other information necessary for full identification—e.g., name(s) and version(s) for machines and/or operating systems; System Name(s) <sup>2</sup>                                                                                                                                           |  |  |  |
| NOTE 1—Required for all implementations.<br>NOTE 2—May be completed as appropriate in meeting the requirements for the identification.<br>NOTE 3—The terms Name and Version should be interpreted appropriately to correspond with a supplier's terminol-<br>ogy (e.g., Type, Series, Model). |  |  |  |

### 142.5.2.2 Protocol summary

| Identification of protocol standard                                                                                                                              | IEEE Std 802.3ca-201x, Clause 142, Physical Coding Sub-<br>layer and Physical Media Attachment for Nx25G-EPON |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|--|--|
| Identification of amendments and corrigenda to this<br>PICS proforma that have been completed as part of<br>this PICS                                            |                                                                                                               |  |  |  |
| Have any Exception items been required? No [] Yes []<br>(See Clause 21; the answer Yes means that the implementation does not conform to IEEE Std 802.3ca-201x.) |                                                                                                               |  |  |  |

| Date of Statement |  |
|-------------------|--|
|-------------------|--|

<sup>&</sup>lt;sup>2</sup>Copyright release for PICS proformas: Users of this standard may freely reproduce the PICS proforma in this subclause so that it can be used for its intended purpose and may further publish the completed PICS.

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| Item | Feature                               | Subclause | Value/Comment                                                                                                                        | Status | Support           |
|------|---------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------|
| PCS1 | Transmission bit order                | 142.2     | Per Figure 142–5                                                                                                                     | М      | Yes [ ]           |
| PCS2 | Control code values treated as errors | 142.2.1   | All control code values that do<br>not appear in Table 142–2 are<br>not to be transmitted and are<br>treated as an error if received | М      | Yes [ ]           |
| *OLT | OLT functionality                     |           | Device supports functionality required for OLT                                                                                       | O/1    | Yes [ ]<br>No [ ] |
| *ONU | ONU functionality                     |           | Device supports functionality required for ONU                                                                                       | O/1    | Yes [ ]<br>No [ ] |

# 142.5.4 PCS Processes

| Item  | Feature                        | Subclause   | Value/Comment                                                                                     | Status | Support |
|-------|--------------------------------|-------------|---------------------------------------------------------------------------------------------------|--------|---------|
| PSD1  | FEC Encoder                    | 142.2.4     | Encodes the transmitted data<br>stream using a quasi-cyclic<br>LDPC FEC, defined<br>in 142.2.4.1. | М      | Yes [ ] |
| PSD1a | FEC codeword shortening        | 142.2.4.2   | Supports FEC shortening                                                                           | М      | Yes [ ] |
| PSD1b | FEC encoding process           | 142.2.4.2   | Per 142.2.4.2                                                                                     | М      | Yes [ ] |
| PSD2  | Input Process                  | 142.2.5.4.1 | As depicted in Figure 142–10                                                                      | М      | Yes [ ] |
| PSD3  | Framer Process                 | 142.2.5.4.2 | As depicted in Figure 142–11                                                                      | М      | Yes [ ] |
| PSD4  | Transmit Process               | 142.2.5.4.3 | As depicted in Figure 142–12                                                                      | М      | Yes [ ] |
| PSD5  | 64B/66B Decoder                | 142.3.4     | As depicted in Figure 49-17                                                                       | М      | Yes [ ] |
| PSD6a | Synchronizer Process in OLT    | 142.3.5.4   | As depicted in Figure 142–15,<br>for every enabled receive<br>channel                             | OLT:M  | Yes [ ] |
| PSD6b | Synchronizer Process in<br>ONU | 142.3.5.5   | As depicted in Figure 142–16,<br>for every enabled receive<br>channel                             | ONU:M  | Yes [ ] |
| PSD7  | Output Process                 | 142.3.5.7   | As depicted in Figure 142–17,<br>for every enabled receive<br>channel                             | М      | Yes [ ] |

## 142.5.5 PMA Processes

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| Item  | Feature                                      | Subclause | Value/Comment                                                                                                   | Status | Support |
|-------|----------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------|--------|---------|
| PMA1  | Differential Encoder in OLT                  | 142.4.1   | As depicted in Figure 142–18                                                                                    | OLT:M  | Yes [ ] |
| PMA2a | Differential Decoder in ONU                  | 142.4.2   | As depicted in Figure 142–19                                                                                    | ONU:M  | Yes [ ] |
| PMA2b | Automatic detection of differential encoding | 142.4.2   | ONU implements automatic<br>detection of RX path<br>differential encoding and<br>enables decoder as appropriate | ONU:M  | Yes [ ] |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  $\begin{array}{c} 18\\ 19\\ 20\\ 21\\ 22\\ 23\\ 24\\ 25\\ 26\\ 27\\ 28\\ 29\\ 30\\ 31\\ 32\\ 33\\ 34\\ 35\\ 36\\ 37\\ 38\\ 39\\ 40\\ 41 \end{array}$ 42 43 44 45 46 47 48 49 50 51 52 53 54

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