# 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.  NOTE 2—May be completed as appropriate in meeting the requirements for the identification.  NOTE 3—The terms Name and Version should be interpreted appropriately to correspond with a supplier's terminology (e.g., Type, Series, Model). |  |  |  |  |

### 142.5.2.2 Protocol summary

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

<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.

# 142.5.3 PCS capabilities/options

| Item | Feature                               | Subclause | Value/Comment   | Status | Support |
|------|---------------------------------------|-----------|---|--------|---------|
| PCS1 | Transmission bit order                | 142.2     | Per Figure 142–5  | M      | Yes [ ] |
| PCS2 | Control code values treated as errors | 142.2.1   | All control code values that do not appear in Table 142–2 are not to be transmitted and are treated as an error if received | М      | Yes [ ] |

#### 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   |   | M      | Yes []  |
| PSD1b | FEC encoding process        | 142.2.4.2   | Per 142.2.4.2   | M      | Yes []  |
| PSD2  | Input Process               | 142.2.5.4.1 | As depicted in Figure 142–10  | M      | Yes [ ] |
| PSD3  | Framer Process              | 142.2.5.4.2 | As depicted in Figure 142–11  | M      | 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   | M      | Yes [ ] |
| PSD6a | Synchronizer Process in OLT | 142.3.5.4   | As depicted in Figure 142–15, for every enabled receive channel                                   | M      | Yes [ ] |
| PSD6b | Synchronizer Process in ONU | 142.3.5.5   | As depicted in Figure 142–16, for every enabled receive channel                                   | M      | Yes [ ] |
| PSD7  | Output Process              | 142.3.5.7   | As depicted in Figure 142–17, for every enabled receive channel                                   | М      | Yes [ ] |

## 142.5.5 PMA Processes

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