Annex 4A

(normative)

Protocol implementation conformance statement (PICS)

4A.1 Introduction

This subclause specifies the PICS proforma for individual features as specified in Table 5-1, separated into ONU and OLT specific requirements.

The supplier of an EPON ONU or OLT implementation that is claimed to conform to IEEE Std 1904.4 shall complete the following PICS proforma.[11]

A detailed description of the symbols used in the PICS proforma, along with instructions for completing the PICS proforma, can be found in 3.6.

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[11] *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.

1   **4A.2 ONU-specific PICS**

2   **4A.2.8 Device and capability discovery**

Item	Description	Subclause	Value/Comment	Status	Support
U-DCD0	Implements device and capability discovery	Table 5-1	OLT implements device and capability discovery per 13.3.	M	[ ] Yes
U-DCD1	Discovery LLID	13.3.2	The eOAM discovery process is executed on the primary MLID	M	[ ] Yes
~~U-DCD2a~~	~~Discovery process~~	~~13.3.2.1~~	~~Implement the eOAM discovery process and the eOAM Capability Notification mechanism, using the Organization Specific extensions to the Information TLV specified in IEEE Std 802.3, 57.5.2.3.~~	~~M~~	~~[ ] Yes~~
U-DCD2b	Discovery process	13.3.2.1	Implement the eOAM discovery process by exchanging the *Organization Specific Information* TLV, as defined in IEEE Std 802.3, 57.5.2.3, and further specified in 13.4.4.1, referred to as *Extended Information* TLV.	M	[ ] Yes
~~U-DCD2c~~	~~ONU includes *Extended Information* TLV~~	~~13.3.2.1~~	~~ONU includes the *Extended Information* TLV in all *Information* OAMPDUs exchanged during the eOAM discovery process~~	~~M~~	~~[ ] Yes~~
~~U-DCD2d~~	~~ONU starts discovery process~~	~~13.3.2.1~~	~~ONU starts the eOAM discovery process not later than five seconds after the successful completion of the MPCP discovery and registration process~~	~~M~~	~~[ ] Yes~~
U-DCD3	Ordering *Organization Specific Information* TLVs (source)	13.3.2.2.1	*Local Information* TLV and *Remote Information* TLV are transmitted first, followed by *Organization Specific Information* TLVs.	M	[ ] Yes
U-DCD4a	Ordering *Organization Specific Information* TLVs (destination)	13.3.2.2.2	Support multiple *Information* TLVs in a single *Information* OAMPDU, including *Local Information* TLV, *Remote Information* TLV and at least one *Organization Specific Information* TLV.	M	[ ] Yes
U-DCD4b	Processing order	13.3.2.2.2	Process all received *Information* TLVs in the order of their reception, discarding any *Information* TLVs which are either malformed or unsupported.	M	[ ] Yes
U-DCD5	ONU implementation (~~s~~LC-ONU)	13.3.2.3.6	Implement the extended OAM discovery process as shown in Figure 13-4	M	[ ] Yes

Item	Description	Subclause	Value/Comment	Status	Support
U-DCD6	ONU OAM and eOAM Keep-alive Process	13.3.3	ONU goes through the MPCP deregistration process, as defined in IEEE Std 802.3ca, 144.3.7.	M	[ ] Yes

4A.2 OLT-specific PICS

4A.3.8 Device and capability discovery

Item	Description	Subclause	Value/Comment	Status	Support
T-DCD0	Implements device and capability discovery	Table 5-1	OLT implements device and capability discovery per 13.3.	M	[ ] Yes
T-DCD1	Discovery LLID	13.3.2	The eOAM discovery process is executed on the primary MLID	M	[ ] Yes
T-DCD2a	Discovery process	13.3.2.1	Implement the eOAM discovery process by exchanging the *Organization Specific Information* TLV, as defined in IEEE Std 802.3, 57.5.2.3, and further specified in 13.4.4.1, referred to as *Extended Information* TLV. Implement the eOAM discovery process and the eOAM Capability Notification mechanism, using the Organization Specific extensions to the Information TLV specified in IEEE Std 802.3, 57.5.2.3.	M	[ ] Yes
T-DCD2b	Disable data services	13.3.2.1	OLT disables all data services for the given ONU until the successful completion of the OAM discovery process (see IEEE Std 802.3, 57.3.2.1), and the eOAM discovery process (see 13.3), and the completion of the optional authentication process (see 11.2.2), if enabled by the operator.	M	[ ] Yes
T-DCD2c	Deregister ONU that failed to complete on lack of eOAM discovery	13.3.2.1	OLT deregisters any ONU that failed to complete does not participate in the eOAM discovery process, as defined in 13.3, within five seconds of the time when the OLT sends the first *Extended Information* TLV to this ONU.	M	[ ] Yes
T-DCD2d	Discovery process	13.3.2.1	Implement the eOAM discovery process by exchanging the *Organization Specific Information* TLV, as defined in IEEE Std 802.3, 57.5.2.3, and further specified in 13.4.4.1, referred to as *Extended Information* TLV.	M	[ ] Yes
T-DCD3	Ordering *Organization Specific Information* TLVs (source)	13.3.2.2.1	*Local Information* TLV and *Remote Information* TLV are transmitted first, followed by *Organization Specific Information* TLVs.	M	[ ] Yes

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Item	Description	Subclause	Value/Comment	Status	Support
T-DCD4a	Ordering *Organization Specific Information* TLVs (destination)	13.3.2.2.2	Support multiple *Information* TLVs in a single *Information* OAMPDU, including *Local Information* TLV, *Remote Information* TLV and at least one *Organization Specific Information* TLV.	M	[ ] Yes
T-DCD4b	Processing order	13.3.2.2.2	Process all received *Information* TLVs in the order of their reception, discarding any *Information* TLVs which are either malformed or unsupported.	M	[ ] Yes
T-DCD5	OLT implementation	13.3.2.3.6	Instantiate the extended OAM discovery process as shown in Figure 13-3 for each newly discovered L-ONU	M	[ ] Yes
T-DCD6	OLT deregisters ONU on OAM and eOAM Keep-alive Process failure	13.3.3	If the OLT detects an OAM keep-alive failure for the given ONU, the OLT deregisters the ONU following the MPCP deregistration process, as defined in IEEE Std 802.3ca, 144.3.7	M	[ ] Yes

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