

## Annex A

(normative)

### Protocol Implementation Conformance Statement (PICS) proforma<sup>17</sup>

#### A.1 Introduction

The supplier of a protocol implementation that is claimed to conform to this standard shall complete the following PICS proforma.

A completed PICS proforma is the PICS for the implementation in question. The PICS is a statement of which capabilities and options of the protocol have been implemented. The PICS can have a number of uses, including the following:

- a) By the protocol implementer, as a checklist to reduce the risk of failure to conform to the standard through oversight;
- b) By the supplier and acquirer—or potential acquirer—of the implementation, as a detailed indication of the capabilities of the implementation, stated relative to the common basis for understanding provided by the standard PICS proforma;
- c) By the user—or potential user—of the implementation, as a basis for initially checking the possibility of interworking with another implementation (note that, while interworking can never be guaranteed, failure to interwork can often be predicted from incompatible PICS);
- d) By a protocol tester, as the basis for selecting appropriate tests against which to assess the claim for conformance of the implementation.

#### A.2 Abbreviations and special symbols

##### A.2.1 Status symbols

M	mandatory
O	optional
<i>O.n</i>	optional, but support of at least one of the group of options labeled by the same numeral n is required
X	prohibited
pred:	conditional-item symbol, including predicate identification (see A.3.4)
¬	logical negation, applied to a conditional item's predicate

##### A.2.2 General abbreviations

N/A	not applicable
PICS	Protocol Implementation Conformance Statement

<sup>17</sup> *Copyright release for PICS proformas:* Users of this standard may freely reproduce the PICS proforma in this annex so that it can be used for its intended purpose and may further publish the completed PICS.

## A.3 Instructions for completing the PICS proforma

### A.3.1 General structure of the PICS proforma

The first part of the PICS proforma, implementation identification and protocol summary, is to be completed as indicated with the information necessary to identify fully both the supplier and the implementation.

The main part of the PICS proforma is a fixed-format questionnaire, divided into several subclauses, each containing a number of individual items. Answers to the questionnaire items are to be provided in the rightmost column, either by simply marking an answer to indicate a restricted choice (usually Yes or No), or by entering a value or a set or range of values. (Note that there are some items where two or more choices from a set of possible answers can apply; all relevant choices are to be marked.)

Each item is identified by an item reference in the first column. The second column contains the question to be answered; the third column records the status of the item—whether support is mandatory, optional, or conditional (see also A.3.4). The fourth column contains the reference or references to the material that specifies the item in the main body of this standard, and the fifth column provides the space for the answers.

A supplier might also provide (or be required to provide) further information, categorized as either Additional Information or Exception Information. When present, each kind of further information is to be provided in a further subclause of items labeled *Ai* or *Xi*, respectively, for cross-referencing purposes, where *i* is any unambiguous identification for the item (e.g., simply a numeral). There are no other restrictions on its format and presentation.

A completed PICS proforma, including any Additional Information and Exception Information, is the Protocol Implementation Conformation Statement for the implementation in question.

NOTE—Where an implementation is capable of being configured in more than one way, a single PICS might be able to describe all such configurations. However, the supplier has the choice of providing more than one PICS, each covering some subset of the implementation's configuration capabilities, in case that makes for easier and clearer presentation of the information.

### A.3.2 Additional Information

Items of Additional Information allow a supplier to provide further information intended to assist the interpretation of the PICS. It is not intended or expected that a large quantity will be supplied, and a PICS can be considered complete without any such information. Examples might be an outline of the ways in which a (single) implementation can be set up to operate in a variety of environments and configurations, or information about aspects of the implementation that are outside the scope of this standard but that have a bearing upon the answers to some items.

References to items of Additional Information may be entered next to any answer in the questionnaire and may be included in items of Exception Information.

### A.3.3 Exception Information

It occasionally happens that a supplier will wish to answer an item with mandatory status (after any conditions have been applied) in a way that conflicts with the indicated requirement. No preprinted answer will be found in the Support column for this; instead, the supplier shall write the missing answer into the Support column, together with an *Xi* reference to an item of Exception Information, and shall provide the appropriate rationale in the Exception item itself.

An implementation for which an Exception item is required in this way does not conform to this standard.

NOTE—A possible reason for the situation described above is that a defect in this standard has been reported, a correction for which is expected to change the requirement not met by the implementation.

### A.3.4 Conditional status

#### A.3.4.1 Conditional items

The PICS proforma contains a number of conditional items. These are items for which both the applicability of the item itself, and its status if it does apply—mandatory or optional—are dependent upon whether or not certain other items are supported.

Where a group of items is subject to the same condition for applicability, a separate preliminary question about the condition appears at the head of the group, with an instruction to skip to a later point in the questionnaire if the Not Applicable (N/A) answer is selected. Otherwise, individual conditional items are indicated by a conditional symbol in the Status column.

A conditional symbol is of the form “**pred:** S” where **pred** is a predicate as described in A.3.4.2, and S is a status symbol, M or O.

If the value of the predicate is true (see A.3.4.2), the conditional item is applicable, and its status is indicated by the status symbol following the predicate; the answer column is to be marked in the usual way. If the value of the predicate is false, the N/A answer is to be marked.

#### A.3.4.2 Predicates

A predicate is one of the following:

- a) An item-reference for an item in the PICS proforma; the value of the predicate is true if the item is marked as supported, and is false otherwise;
- b) A predicate-name, for a predicate defined as a Boolean expression constructed by combining item-references using the Boolean operator OR; the value of the predicate is true if one or more of the items is marked as supported;
- c) The logical negation symbol “¬” prefixed to an item-reference or predicate-name; the value of the predicate is true if the value of the predicate formed by omitting the “¬” symbol is false, and vice versa.

Each item whose reference is used in a predicate or predicate definition, or in a preliminary question for grouped conditional items, is indicated by an asterisk in the Item column.

## A.4 PICS proforma for IEEE Std 802.1AS-2020

### A.4.1 Implementation identification

Supplier	
Contact point for queries about the PICS	
Implementation Name(s) and Version(s)	
Other information necessary for full identification—e.g., name(s) and version(s) of machines and/or operating system names	

NOTE 1—Only the first three items are required for all implementations; other information may be completed as appropriate in meeting the requirement for full identification.

NOTE 2—The terms Name and Version should be interpreted appropriately to correspond with a supplier's terminology (e.g., Type, Series, Model).

### A.4.2 Protocol summary, IEEE Std 802.1AS

Identification of protocol specification	IEEE Std 802.1AS-2020, IEEE Standard for Local and metropolitan area networks—Timing and Synchronization for Time-Sensitive Applications								
Identification of amendments and corrigenda to the PICS proforma which have been completed as part of the PICS	<table> <tr> <td>Amd.</td> <td>:</td> <td>Corr.</td> <td>:</td> </tr> <tr> <td>Amd.</td> <td>:</td> <td>Corr.</td> <td>:</td> </tr> </table>	Amd.	:	Corr.	:	Amd.	:	Corr.	:
Amd.	:	Corr.	:						
Amd.	:	Corr.	:						
Have any Exception items been required? (See A.3.3: the answer Yes means that the implementation does not conform to IEEE Std 802.1AS-2020)	<table> <tr> <td>No</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> </tr> </table>	No	<input type="checkbox"/>	Yes	<input type="checkbox"/>				
No	<input type="checkbox"/>	Yes	<input type="checkbox"/>						

Date of Statement	
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## A.5 Major capabilities

Item	Feature	Status	References	Support
DOM0	Does the time-aware system support a PTP Instance with domain number 0, in accordance with the requirements of 8.1?	M	item a) of 5.4, 8.1	Yes [ ]
DOMADD	Does the time-aware system support one or more PTP Instances with domain number in the range 1 to 127?	O	item f) of 5.4.2, 8.1	Yes [ ] No [ ]
MINTA	Does the PTP Instance support at least one PTP Port with minimal requirements?	M	10.2.13, item c) of 5.4, A.7	Yes [ ]
BMC	Does the PTP Instance implement the best master clock algorithm?	M	10.2.13, item f) of 5.4, 10.3, A.9	Yes [ ]
SIG	Does the PTP Instance transmit Signaling messages?	O	10.2.13, item e) of 5.4.2, 10.6.4, A.8	Yes [ ] No [ ]
GMCAP	Is the PTP Instance capable of acting as a Grandmaster PTP Instance?	O	10.2.13, item c) of 5.4.2, 10.1.3, A.10	Yes [ ] No [ ]
BRDG	Does the PTP Instance act as a PTP Relay Instance on two or more PTP Ports?	O	item d) of 5.4.2, 5.4.3	Yes [ ] No [ ]
MIMSTR	Does the PTP Instance support media-independent master functionality on at least one PTP Port?	GMCAP or BRDG:M	item b) of 5.4.2, A.11	Yes [ ] N/A [ ]
MIPERF	Does the PTP Instance support the performance requirements?	M	10.2.13, item j) of 5.4, A.12	Yes [ ]
EXT	Does the PTP Instance support external port configuration?	O	item g) of 5.4.2, A.21	Yes [ ] No [ ]
MDFDPP	Does the PTP Instance support media-dependent full-duplex point-to-point functionality on one or more PTP Ports?	O.1	5.5, Clause 11, A.6, A.13	Yes [ ] No [ ]
MDDOT11	Does the PTP Instance support media-dependent IEEE 802.11 link functionality on one or more PTP Ports?	O.1	5.6, Clause 12, A.6, A.14	Yes [ ] No [ ]
MDEPON	Does the PTP Instance support IEEE 802.3 Passive Optical Networking (EPON)?	O.1	5.7, Clause 13, A.6, A.15	Yes [ ] No [ ]
MDGHN	Does the PTP Instance support media-dependent ITU-T G.hn functionality on one or more PTP Ports?	O.1	item b) of 5.8, 16.6.3, A.18	Yes [ ] No [ ]
MDMOCA	Does the PTP Instance support media-dependent MoCA functionality on one or more PTP Ports?	O.1	item b) of 5.8, 16.6.2, A.17	Yes [ ] No [ ]
MDCSN	Does the PTP Instance support media-dependent CSN functionality on one or more PTP Ports?	MDGHN or MDMOCA:M	5.8, Clause 16, A.6, A.16	Yes [ ] No [ ]

## A.5 Major capabilities *(continued)*

Item	Feature	Status	References	Support
MGT	Is management of the PTP Instance supported?	O	item j) of 5.4.2, Clause 14	Yes [ ] No [ ]
RMGT	Is a remote management protocol supported?	MGT: O	item k) of 5.4.2, A.19	Yes [ ] No [ ]
APPL	Does the PTP Instance support one or more of the application interfaces?	O	item i) of 5.4.2, Clause 9, A.20	Yes [ ] No [ ]

## A.6 Media access control methods

Item	Feature	Status	References	Support
MAC-IEEE-802.3 MAC-IEEE-802.11	Which MAC methods are implemented in conformance with the relevant MAC standards?	O:2	11.1	Yes [ ] No [ ]
		O:2	12.1	Yes [ ] No [ ]
MAC-1	Has a PICS been completed for each of the MAC methods implemented as required by the relevant MAC Standards?	M		Yes [ ]
MAC-2	Do all the MAC methods implemented support the MAC Timing aware Service as specified?	M	Clause 11 Clause 12 Clause 13	Yes [ ]

## A.7 Minimal time-aware system

Item	Feature	Status	References	Support
MINTA-1	Do all PTP Instances of the device implement the functionality specified by the SiteSyncSync state machine in Figure 10-3 in compliance with the requirements of 10.2.7?	M	item g) of 5.4, 10.2.7	Yes [ ]
MINTA-2	Do all PTP Instances of the device implement the functionality specified by the PortSyncSyncReceive state machine in Figure 10-4 on each PTP Port in compliance with the requirements of 10.2.8?	M	item d) of 5.4	Yes [ ]
MINTA-3	Do all PTP Instances of the device implement the functionality specified by the ClockSlaveSync state machine in Figure 10-9 in compliance with the requirements of 10.2.13?	M	10.2.13, item e) of 5.4	Yes [ ]

## A.7 Minimal time-aware system *(continued)*

Item	Feature	Status	References	Support
MINTA-4	For all PTP Instances of the device, does the PTP Port sending a Signaling message that contains a message interval request TLV adjust its syncReceiptTimeoutTimeInterval of this PTP Instance in compliance with the requirements of 10.6.4.3.7 and Table 10-16?	SIG:M	10.6.4.3.7	Yes [ ]    N/A [ ]
MINTA-5	Is the clockIdentity constructed in compliance with the requirements of 8.5.2.2?	M	8.5.2.2	Yes [ ]
MINTA-6	Is the domain number for all transmitted messages in the range 0 through 127, in compliance with the requirements of 8.1?	M	8.1	Yes [ ]
MINTA-7	Is the majorSdoId 0x1 and the minorSdoId 0x0 for all transmitted gPTP domain messages?	M	8.1	Yes [ ]
MINTA-8	Is the domain number for at least one of the gPTP domains supported by the time-aware system, in compliance with the requirements of 8.1?	M	8.1	Yes [ ]
MINTA-9	Is the IEEE 802.1AS time of domain 0 measured relative to the PTP epoch in compliance with the requirements of 8.2.2?	M	8.2.2	Yes [ ]
MINTA-10	If path delay asymmetry is modeled by this PTP Instance does it comply with the requirements of 8.3?	O	8.3	Yes [ ]    No [ ]
MINTA-11	Do all derived data types that are transmitted in IEEE 802.1AS messages and headers comply with 6.4.4?	M	6.4.4	Yes [ ]
MINTA-12	Is the granularity of the local clock 40 ns or better in compliance with the requirements of B.1.2?	M	B.1.2	Yes [ ]
MINTA-13	Is the frequency of the local clock relative to TAI $\pm 100$ ppm in compliance with the requirements of B.1.1?	M	B.1.1	Yes [ ]
MINTA-14	Does the PTP Instance ignore non-propagating TLVs of Announce and Signaling messages that it cannot parse, and attempt to parse the next TLV, in compliance with the requirements of 10.6.1?	M	10.6.1	Yes [ ]
MINTA-15	Does the PTP Instance support the state machines related to signaling gPTP capability?	M	item h) of 5.4, 10.4	Yes [ ]
MINTA-16	For receive of all messages and for transmit of all messages except Announce and Signaling, does the PTP Instance support the message requirements?	M	item i) of 5.4, 10.5, 10.6, 10.7	Yes [ ]

## A.7 Minimal time-aware system *(continued)*

Item	Feature	Status	References	Support
MINTA-17	Does the PTP Instance support the gPTP requirements specified in Clause 8, including the PTP Instance attributes?	M	item a) of 5.4, Clause 8, 8.6.2	Yes [ ]
MINTA-18	Does the PTP Instance support the requirements for time-synchronization state machines?	M	item b) of 5.4	Yes [ ]
MINTA-19	Does the PTP Instance implement the path trace TLV (i.e., process this TLV when received in an Announce message, and attach this TLV to a transmitted Announce message unless the TLV would cause the maximum frame size to be exceeded)?	M	10.3.11, 10.3.13, 10.3.14, 10.3.16	Yes [ ]
MINTA-20	Does the PTP Instance forward TLVs as required?	M	10.6.1	Yes [ ]

## A.8 Signaling

Item	Feature	Status	References	Support
SIG-1	Do the sequence numbers of Signaling messages comply with the requirements of 10.5.7?	SIG:M	10.5.7	Yes [ ]
SIG-2	Does the Signaling message body comply with the requirements of 10.6.4.1 and Table 10-13?	SIG:M	10.6.4.1	Yes [ ]
SIG-3	Does the Signaling message header comply with the requirements of 10.6.2?	SIG:M	10.6.2	Yes [ ]
SIG-4	Are all Signaling message reserved fields equal to 0 in compliance with the requirements of 10.6.1?	SIG:M	10.6.1	Yes [ ]
SIG-5	Is the destination MAC address for all Signaling messages equal to 01:80:C2:00:00:0E in compliance with the requirements of 10.5.3?	SIG:M	10.5.3	Yes [ ]
SIG-6	Is the EtherType for all Signaling messages equal to 88-F7 in compliance with the requirements of 10.5.4?	SIG:M	10.5.4	Yes [ ]
SIG-7	Does the message interval request TLV for Signaling messages comply with the requirements in 10.6.4.3?	SIG:M	10.6.4.3	Yes [ ]



## A.9 Best master clock

Item	Feature	Status	References	Support
BMC-1	Does the PTP Instance implement the functionality specified by the PortAnnounceReceive state machine in Figure 10-13 on each PTP Port in compliance with the requirements of 10.3.11?	M	10.3.11	Yes [ ]
BMC-2	Does the PTP Instance implement the functionality specified by the PortAnnounceInformation state machine in Figure 10-14 on each PTP Port in compliance with the requirements of 10.3.12?	M	10.3.12	Yes [ ]
BMC-3	Does the PTP Instance implement the functionality specified by the PortStateSelection state machine in Figure 10-15 on each PTP Port in compliance with the requirements of 10.3.13?  NOTE—There is one instance of the PortStateSelection state machine for the PTP Instance, for each gPTP domain. Some of the PortStateSelection state machine computations are performed for each PTP Port, and some of the computations are performed for the PTP Instance as a whole (and all the computations are performed for each gPTP domain).	M	10.3.13	Yes [ ]
BMC-4	If the value of clockA's SystemIdentity is less than that of clockB, is clockA selected as Grandmaster PTP Instance in compliance with the requirements of 10.3.2?	M	10.3.2	Yes [ ]
BMC-5	Does the value of priority1 comply with the requirements of 8.6.2.1?	M	8.6.2.1	Yes [ ]
BMC-6	Does the value of clockClass comply with the requirements of 8.6.2.2?	M	8.6.2.2	Yes [ ]
BMC-7	Does the value of priority2 comply with the requirements of 8.6.2.5?	M	8.6.2.5	Yes [ ]
BMC-8	Does the value of clockAccuracy comply with requirements of 8.6.2.3?	M	8.6.2.3	Yes [ ]
BMC-9	Does the value of offsetScaledVariance comply with the requirements of 8.6.2.4?	M	8.6.2.4	Yes [ ]
BMC-10	Does the value of timeSource comply with requirements of 8.6.2.7 and Table 8-2?	M	8.6.2.7	Yes [ ]
BMC-11	Is the PTP Port number equal to 1 in compliance with the requirements of 8.5.2.3?	~BRDG:M	8.5.2.3	Yes [ ]    N/A [ ]

## A.9 Best master clock *(continued)*

Item	Feature	Status	References	Support
BMC-12	Are the PTP Ports numbered 1 through N for each of N PTP Ports in compliance with the requirements of 8.5.2.3?	M	8.5.2.3	Yes [ ]
BMC-13	Does the clockIdentity field comply with the requirements of 8.5.2.2?	M	8.5.2.2	Yes [ ]
BMC-14	When no grandmaster-capable PTP Instance is available does the behavior of the PTP Instance comply with the requirements of 10.2.13.2, i.e., the clockSlaveTime should be provided by the local clock?	M	10.2.13.2	Yes [ ]
BMC-15	Does the value of announceReceiptTimeout comply with the requirements of 10.7.3.2?	M	10.7.3.2	Yes [ ]
BMC-16	Does the SlavePort remove the PTP Port from the BMC selection after announceReceiptTimeout expires in compliance with the requirements of 10.7.3.2?	M	10.7.3.2	Yes [ ]
BMC-17	Does the value of syncReceiptTimeout comply with the requirements of 10.7.3.1?	M	10.7.3.1	Yes [ ]
BMC-18	Does the SlavePort remove the PTP Port from the BMC selection after syncReceiptTimeout expires in compliance with 10.7.3.1?	M	10.7.3.1	Yes [ ]
BMC-19	Does the PTP Port sending a message interval request Signaling message adjust its announceReceiptTimeoutTimeInterval in compliance with the requirements of 10.6.4.3.8 and Table 10-17?	SIG:M	10.6.4.3.8	Yes [ ]
BMC-20	If the PTP Instance implements the ClockSourceTime interface, does the value of lastGmPhaseChange comply with the requirements of 9.2.2 and 6.4.3.3?	O	9.2.2	Yes [ ] No [ ]
BMC-21	Does the transmitted timing information comply with the requirements of 10.3.1, including specifications for externalPortConfigurationEnabled value of false?	GMCAP:M	10.3.1	Yes [ ] N/A [ ]
BMC-22	Does the PTP Instance implement BMCA requirements that are not listed in the preceding BMC rows?	M	10.3.2, 10.3.3, 10.3.4, 10.3.5, 10.3.6, 10.3.8, 10.3.10	Yes [ ]

## A.10 Grandmaster-capable PTP Instance

Item	Feature	Status	References	Support
	If GMCAP not supported, mark N/A.			N/A [ ]
GMCAP-1	Does the PTP Instance implement the functionality specified by the ClockMasterSyncSend state machine in compliance with the requirements of 10.2.9 and Figure 10-5?	GMCAP:M	10.2.9	Yes [ ]
GMCAP-2	Does the PTP Instance implement the functionality specified by the ClockMasterSyncOffset state machine in compliance with the requirements of 10.2.10 and Figure 10-6?	GMCAP:M	10.2.10	Yes [ ]
GMCAP-3	Does the device implement the functionality specified by the ClockMasterSyncReceive state machine in compliance with the requirements of 10.2.11 and Figure 10-7?	GMCAP:M	10.2.11	Yes [ ]

## A.11 Media-independent master

Item	Feature	Status	References	Support
	If MIMSTR not supported, mark N/A.			N/A [ ]
MIMSTR-1	Does the PTP Instance implement the functionality of the AnnounceIntervalSetting state machine in compliance with the requirements of 10.3.17 and Figure 10-19 on each PTP Port?	MIMSTR:M	10.3.17	Yes [ ]
MIMSTR-2	Does the PTP Instance implement the functionality of the PortSyncSyncSend state machine in compliance with the requirements of 10.2.9 and Figure 10-8 on each PTP Port?	MIMSTR:M	10.2.9	Yes [ ]
MIMSTR-3	Does the PTP Instance implement the functionality of the PortAnnounceTransmit state machine in compliance with the requirements of 10.3.16 and Figure 10-18 on each PTP Port?	MIMSTR:M	10.3.16	Yes [ ]
MIMSTR-4	Does the destination MAC address of all Announce messages equal 01:80:C2:00:00:0E?	MIMSTR:M	10.5.3	Yes [ ]
MIMSTR-5	Does the EtherType of all Announce messages equal 88-F7?	MIMSTR:M	10.5.4	Yes [ ]
MIMSTR-6	Do the sequence numbers of Announce messages comply with the requirements of 10.5.7?	MIMSTR:M	10.5.7	Yes [ ]

## A.11 Media-independent master *(continued)*

Item	Feature	Status	References	Support
MIMSTR-7	Does the Announce message header comply with 10.6.2?	MIMSTR:M	10.6.2	Yes [ ]
MIMSTR-8	Does the Announce message body comply with the requirements in 10.6.3.1 and Table 10-11?	MIMSTR:M	10.6.3.1	Yes [ ]
MIMSTR-9	Are all Announce message reserved fields equal to 0?	MIMSTR:M	10.6.1	Yes [ ]
MIMSTR-10	If it is not otherwise specified, is the logAnnounceInterval equal to zero or within the allowed range?	MIMSTR:M	10.7.2.1	Yes [ ]
MIMSTR-11	Does the value of currentUtcOffset comply with the requirements of 8.2.3?	MIMSTR:M	8.2.3	Yes [ ]
MIMSTR-12	Do the values of the leap59, leap61, and currentUtcOffsetValid flags comply with the requirements of 10.3.8?	MIMSTR:M	10.3.8	Yes [ ]
MIMSTR-13	Does this PTP Instance ensure that messages that traverse it or originate from it are not transmitted with VLAN tags in compliance with the requirements of 11.3.3?	MIMSTR:M	11.3.3	Yes [ ]
MIMSTR-14	Is the computation of cumulative rateRatio in accordance with 10.2.8.3?	MIMSTR:M	10.2.8.3	Yes [ ]    N/A [ ]
MIMSTR-15	For transmit of the Announce message, does the PTP Instance support the message requirements?	MIMSTR:M	10.5, 10.6, 10.7	Yes [ ]

## A.12 Media-independent performance requirements

Item	Feature	Status	References	Support
MIPERF-1	Does the PTP Instance comply with the performance requirements of B.1?	M	B.1	Yes [ ]
MIPERF-2	Does the PTP Instance comply with the performance requirements of B.2.4?	M	B.2.4	Yes [ ]
MIPERF-3	Does the PTP Instance comply with the performance recommendations of B.2.2?	O	B.2.2	Yes [ ]    No [ ]
MIPERF-4	Does the PTP Instance comply with the performance recommendations of B.2.3?	O	B.2.3	Yes [ ]    No [ ]

### A.13 Media-dependent, full-duplex point-to-point link

Item	Feature	Status	References	Support
MDFDPP-1	Does this PTP Port implement the functionality of the MDSyncReceiveSM state machine in compliance with the requirements of 11.2.14 and Figure 11-6?	MDFDPP:M	11.2.14	Yes [ ]
MDFDPP-2	Does this PTP Port implement the functionality of the MDSyncSendSM state machine in compliance with the requirements of 11.2.15 and Figure 11-7?	MIMSTR and MDFDPP:M	11.2.15	Yes [ ]
MDFDPP-3	Does this port implement the functionality of the MDPdelayRequest state machine in compliance with the requirements of 11.2.19 and Figure 11-9?	MDFDPP:M	11.2.19	Yes [ ]
MDFDPP-4	Does this port implement the functionality of the MDPdelayResponse state machine in compliance with the requirements of 11.2.20 and Figure 11-10?	MDFDPP:M	11.2.20	Yes [ ]
MDFDPP-5	Does this PTP Port implement the functionality of the SyncIntervalSetting state machine in compliance with the requirements of 10.3.18 and Figure 10-20?	MDFDPP:M	10.3.18, item c) of 5.5, 10.3.18	Yes [ ]
MDFDPP-6	Does this port implement the functionality of the LinkDelayIntervalSetting state machine in compliance with the requirements of 11.2.21 and Figure 11-11?	MDFDPP:M	11.2.21	Yes [ ]
MDFDPP-7	Does this PTP Port timestamp Sync messages on ingress with respect to the LocalClock in compliance with 11.3.2.1 and 11.3.9?	MDFDPP:M	11.3.2.1	Yes [ ]
MDFDPP-8	Does this PTP Port timestamp Sync messages on egress with respect to the LocalClock in compliance with the requirements of 11.3.2.1 and 11.3.9?	MIMSTR and MDFDPP:M	11.3.2.1	Yes [ ]
MDFDPP-9	Does this port timestamp Pdelay_Req messages on ingress and egress with respect to the LocalClock in compliance with the requirements of 11.3.2.1 and 11.3.9?	MDFDPP:M	11.3.2.1	Yes [ ]
MDFDPP-10	Does this port timestamp Pdelay_Resp messages on ingress and egress with respect to the LocalClock in compliance with the requirements of 11.3.2.1 and 11.3.9?	MDFDPP:M	11.3.2.1	Yes [ ]
MDFDPP-11	Are all IEEE 802.1AS messages on this port sent without a Q-tag in compliance with the requirements of 11.3.3?	MDFDPP:M	11.3.3	Yes [ ]
MDFDPP-12	Do all media-dependent messages transmitted on this port use a destination MAC address taken from Table 11-3 in compliance with the requirements of 11.3.4 [01-80-C2-00-00-0E]?	MDFDPP:M	11.3.4	Yes [ ]

### A.13 Media-dependent, full-duplex point-to-point link *(continued)*

Item	Feature	Status	References	Support
MDFDPP-13	Do all media-dependent messages transmitted on this port use a source MAC address that is assigned to that port in compliance with the requirements of 11.3.4?	MDFDPP:M	11.3.4	Yes [ ]
MDFDPP-14	Do all media-dependent message transmitted on this port us an EtherType specified in Table 11-4 [88-F7]?	MDFDPP:M	11.3.5	Yes [ ]
MDFDPP-15	Does the header of all the media-dependent messages on this port comply with the requirements of 11.4.2 and Table 10-7?	MDFDPP:M	11.4.2	Yes [ ] N/A [ ]
MDFDPP-16	Does the body of Sync messages sent on this PTP Port comply with the requirements of 11.4.3, Table 11-8, and Table 11-9?	MDFDPP:M	11.4.3	Yes [ ]
MDFDPP-17	Does the body of Follow_Up messages sent on this PTP Port comply with the requirements of 11.4.4, 6.4.3.3 (lastGmPhaseChange), and Table 11-10?	MDFDPP:M	11.4.4, 6.4.3.3	Yes [ ]
MDFDPP-18	Does the body of Pdelay_Req messages sent on this port comply with the requirements of 11.4.5 and Table 11-12?	MDFDPP:M	11.4.5	Yes [ ]
MDFDPP-19	Does the body of Pdelay_Resp messages sent on this port comply with the requirements of 11.4.6 and Table 11-13?	MDFDPP:M	11.4.6	Yes [ ]
MDFDPP-20	Does the body of Pdelay_Resp_Follow_Up messages sent on this port comply with the requirements of 11.4.7 and Table 11-14?	MDFDPP:M	11.4.7	Yes [ ]
MDFDPP-21	Are all reserved fields in media-dependent messages sent on this port set to 0 in compliance with the requirements of 11.4.1?	MDFDPP:M	11.4.1	Yes [ ]
MDFDPP-22	Do the Sync message sequence numbers comply with the requirements of 11.3.8?	MIMSTR and MDFDPP:M	11.3.8	Yes [ ] N/A [ ]
MDFDPP-23	Do the Pdelay_Req message sequence numbers comply with the requirements of 11.3.8?	MDFDPP:M	11.3.8	Yes [ ]
MDFDPP-24	Does the Pdelay mean request transmission interval comply with the requirements of 11.5.2.2?	MDFDPP:M	11.5.2.2	Yes [ ]
MDFDPP-25	Does the Sync mean transmission interval comply with the requirements of 11.5.2.3?	MDFDPP:M	11.5.2.3	Yes [ ]
MDFDPP-26	Does the full-duplex point-to-point media-dependent layer set the asCapable global variable in the media-independent PortSync entity in compliance with the requirements of 11.2.2?	MDFDPP:M	11.2.2	Yes [ ]

### A.13 Media-dependent, full-duplex point-to-point link *(continued)*

Item	Feature	Status	References	Support
MDFDPP-27	Does the device's use of flow control comply with the requirements of 11.2.3 and 11.2.4?	MDFDPP:M	11.2.3, 11.2.4	Yes [ ]
MDFDPP-28	Does the PTP Instance or CMLDS consider the PTP Port or Link Port, respectively, to not be exchanging Pdelay messages when a valid response is not received in compliance with the requirements of 11.5.3?	MDFDPP:M	11.5.3	Yes [ ]
MDFDPP-29	Does the PTP Instance ignore TLVs, of PTP messages, that it cannot parse and attempt to parse the next TLV, in compliance with the requirements of 11.4.1?	MDFDPP:M	11.4.1	Yes [ ]
MDFDPP-30	Does the time-aware system initialize meanLinkDelayThresh as specified in 11.2.2?	MDFDPP:M	11.2.2	Yes [ ]
MDFDPP-31	Does this port of the time-aware system support asymmetry measurement mode (see Annex G for informative description)?	MDFDPP:O	14.13, 14.18, 10.2.5, 10.2.8, 10.3.12, 10.3.13, 10.3.15, 10.3.16, 11.2.14, 11.2.15, 11.2.20	Yes [ ]    No [ ]
MDFDPP-32	Does this PTP Port support one-step receive?	MDFDPP:O	11.2.14	Yes [ ]    No [ ]
MDFDPP-33	Does this PTP Port support one-step transmit?	MDFDPP:O	11.2.15	Yes [ ]    No [ ]
MDFDPP-34	Does this PTP Port implement the functionality of the OneStepTxOperSetting state machine in compliance with the requirements of 11.4, 11.2.16, and Figure 11-8?	MDFDPP:O	11.4, 11.2.16	Yes [ ]    No [ ]
MDFDPP-35	Does this port support propagation delay averaging?	MDFDPP:O	11.2.19.3.4	Yes [ ]    No [ ]

## A.14 Media-dependent IEEE 802.11 link

Item	Feature	Status	References	Support
MDDOT11-1	Does the IEEE 802.11 MAC implement the master port functionality in compliance with the requirements of 12.5.1?	MDDOT11 and MIMSTR:M	item d) of 5.6, 12.5.1	Yes [ ]
MDDOT11-2	Does the IEEE 802.11 MAC implement the slave port functionality in compliance with the requirements of 12.5.2?	MDDOT11:M	item a), item b), and item d) of 5.6, 12.5.2	Yes [ ]
MDDOT11-3	Does the IEEE 802.11 MAC determine the value of asCapable in compliance with the requirements of 12.4?	MDDOT11:M	12.4	Yes [ ]
MDDOT11-4	Does the IEEE 802.11 MAC determine the value of mean time interval between synchronization messages in compliance with the requirements of 12.8?	MDDOT11 and MIMSTR:M	12.8	Yes [ ]
MDDOT11-5	Does the IEEE 802.11 MAC support the use of the VendorSpecific information element of 12.7 to carry end-to-end link-independent timing information?	MDDOT11:M	12.7	Yes [ ]
MDDOT11-6	Does the IEEE 802.11 MAC implement Fine Timing Measurement as a master port?	MDDOT11-1:O	item c) and item e) of 5.6, 12.5.1	Yes [ ] No [ ]
MDDOT11-7	Does the IEEE 802.11 MAC implement Fine Timing Measurement as a slave port?	MDDOT11-2:O	item c) and item e) of 5.6, 12.5.2	Yes [ ] No [ ]

## A.15 Media-dependent IEEE 802.3 EPON link

Item	Feature	Status	References	Support
MDEPON-1	Does the TIMESYNC message format comply with the requirements of 13.3 and Table 13-1?	MDEPON:M	13.3	Yes [ ]
MDEPON-2	Does the PTP Instance implement the functionality specified by the requester state machine in compliance with the requirements of 13.8.1 and Figure 13-3?	MDEPON and MIMSTR:M	13.8.1.4	Yes [ ]
MDEPON-3	Does the PTP Instance implement the functionality specified by the responder state machine in compliance with the requirements of 13.8.2 and Figure 13-4?	MDEPON:M	13.8.2.4	Yes [ ]
MDEPON-4	Does the TIMESYNC message transmission interval comply with the requirements of 13.9.1 and 13.9.2?	MDEPON:M	13.9.1, 13.9.2	Yes [ ]



### A.15 Media-dependent IEEE 802.3 EPON link *(continued)*

Item	Feature	Status	References	Support
MDEPON-5	Does the implementation of best master selection comply with the requirements of 13.1.3?	MDEPON:M	13.1.3	Yes [ ]
MDEPON-6	Does the determination of the value of asCapable comply with the requirements of 13.4?	MDEPON:M	13.4	Yes [ ]

### A.16 Media-dependent CSN link

Item	Feature	Status	References	Support
MDCSN-1	Does the PTP Instance implement the functionality of the MDSyncSendSM state machine in compliance with 11.2.15?	MDCSN and MIMSTR:M	11.2.15	Yes [ ]
MDCSN-2	Does the PTP Instance implement the functionality of the MDSyncReceiveSM state machine in compliance with 11.2.14?	MDCSN:M	11.2.14	Yes [ ]
MDCSN-3	Does the PTP Instance calculate path delay in compliance with the requirement of 16.4?	MDCSN:M	16.4.1, 16.4.2, 16.4.3	Yes [ ]
MDCSN-4	Does the PTP Instance propagate synchronized time in compliance with the requirements of 16.5?	MDCSN:M	16.5.2, 16.5.3	Yes [ ]
MDCSN-5	Does the PTP Instance act as Grandmaster PTP Instance in compliance with the requirements of 16.7?	GMCAP and MDCSN:M	16.7	Yes [ ]
MDCSN-6	Does the PTP Instance comply with the performance requirements of 16.8?	GMCAP and MDCSN:M	16.8	Yes [ ]

### A.17 Media-dependent MoCA link

Item	Feature	Status	References	Support
MDMOCA-1	Does the MoCA MD entity propagate Sync messages in compliance with the requirements of 16.6.2?	MDMOCA:M	16.6.2	Yes [ ]

## A.18 Media-dependent ITU-T G.hn link

Item	Feature	Status	References	Support
MDGHN-1	Does the GHN MD entity propagate Sync messages in compliance with the requirements of 16.6.3?	MDGHN:M	16.6.3	Yes [ ]

## A.19 Remote management

Item	Feature	Status	References	Support
	If item RMGT is not supported, mark N/A.			N/A[ ]
RMGT-1	What management protocol standard(s) or specification(s) are supported?	RMGT:M	item k) 1) of 5.4.2	
RMGT-2	What standard(s) or specification(s) for managed object definitions and encodings are supported for use by the remote management protocol?	RMGT:M	item k) 2) of 5.4.2	
RMGT-3	If the Simple Network Management Protocol (SNMP) is listed in RMGT-2, is the IEEE 8021-AS-MIB module fully supported (per its MODULE-COMPLIANCE)?	RMGT:O	item k) 3) of 5.4.2, Clause 15	Yes [ ] No [ ]

## A.20 Application interfaces

Item	Feature	Status	References	Support
	If item APPL is not supported, mark N/A.			N/A[ ]
APPL-1	What application interfaces(s) are supported?	APPL:M	item i) of 5.4.2	

## A.21 External port configuration

Item	Feature	Status	References	Support
	If item EXT is not supported, mark N/A.			NA[ ]
EXT-1	Does the PTP Instance support the specifications for externalPortConfigurationEnabled value of true?	EXT:M	10.3.1	Yes [ ]
EXT-2	Does the PTP Instance support the PortAnnounceInformationExt state machine?	EXT:M	10.3.14	Yes [ ]
EXT-3	Does the PTP Instance support the PortStateSettingExt state machine?	EXT:M	10.3.15	Yes [ ]