

Annex C MTS(P1) PICS Proformas

C.1 General

As a prerequisite to conformance testing the supplier of an MTS(P1) implementation must provide a Protocol Implementation Conformance Statement (PICS).

The proforma MTS(P1) PICS contained in this Annex specifies the information to be supplied.

This information is needed for test case selection. Suppliers should note that tests will be performed to check that services shown as not supported are in fact not present rather than improperly implemented.

The MTS(P1) PICS is in two parts:

- a part requesting information concerning the support of service elements,
- a part requesting information concerning the support of protocol elements.

Information on service element support is requested in tabular form where, for each service element,

- the status of the service element is indicated as mandatory (M), optional (O) or not applicable (-) in columns labelled "STD",
- the actual support of the service element by the implementation on origination and reception is indicated by the supplier in columns labelled "IMP".

Information on protocol element support is requested in tabular form where, for each protocol element,

- the status of the protocol element on origination and reception is indicated as mandatory (M) or optional (O) in columns labelled "STD",
- any implementation constraints are indicated in the column labelled "CONST STD" where constraints are interpreted as a minimum for reception and a maximum for origination,
- the actual support of the protocol element by the implementation on origination and on reception is indicated by the supplier in the column labelled "STATUS IMP",

- the actual constraints of the implementation on origination and on reception is indicated by the supplier in the columns labelled "CONST IMP".

Constraints may be expressed as a length or size (octets, bits,...), a value (32k-1) or a number of occurrences (4) depending on the element being constrained.

C.2 Originator/Recipient/Relay Capability

Suppliers of an implementation should specify Originator/Recipient/Relay capabilities in the IMPLEMENTED column of Table C-1/X.403.

Table: C-1/X.403

C.3 MTS(P1) PICS Service Elements Proforma

The requirements of the X.400 Recommendations are shown in the STD columns of the proforma using the following keys:

- M : Mandatory element (X.401 Basic or Essential Optional)
- O : Optional element (X.401 Additional Optional)
- : Not applicable service element

Suppliers of an implementation should use the IMP columns in the proforma to specify information concerning the support of service elements. For convenience it is suggested that suppliers need only indicate with an "X" those service elements that are not supported.

Table: C-2/X.403 MTS(P1) Service Elements Proforma.

The requirements of the X.400 Recommendations are shown in the STATUS STD column of the proformas in Tables C-3/X.403 to C-6/X.403 using the following keys:

- M : Mandatory element (X.401 Basic or Essential Optional)
- O : Optional element (X.401 Additional Optional)

In the tables below protocol elements which correspond directly to service elements are indicated as mandatory if their corresponding service elements are shown in X.401 (1984) as Basic or Essential Optional, and as optional if their corresponding service elements are shown in X.401 (1984) as Additional Optional. Other protocol elements are indicated as mandatory or optional according to their designation in the MPDU definitions in X.411 (1984).

For relay functions, protocol elements are indicated as mandatory or optional based only on their status in the P1 protocol specification.

The pragmatic constraints of the X.400 Implementor's Guide are shown in the CONS STD columns of the proformas in Tables C-3/X.403 to C-6/X.403.

Suppliers of an implementation should use:

- the STATUS IMP column in each proforma to specify information concerning the support of protocol elements. For convenience it is suggested that suppliers need only indicate with an "X" those protocol elements that are not supported.
- the CONS IMP columns in each proforma to specify the actual constraints of the implementation.

Table: C-3/X.403 ORName and EncodedInformationType Proforma

Table: C-4/X.403 UserMPDU Proforma (part 1 of 2)

Table: C-4/X.403 UserMPDU Proforma (part 2 of 2)

Table: C-5/X.403 DeliveryReportMPDU Proforma (part 1 of 2)

Table: C-5/X.403 DeliveryReportMPDU Proforma (part 2 of 2)

Table: C-6/X.403 ProbeMPDU Proforma (part 1 of 2)

Table: C-6/X.403 ProbeMPDU Proforma (part 2 of 2)

Annex D RTS PICS Proformas

D.1 General

As a prerequisite to the conformance testing of an RTS implementation the supplier must provide a Protocol Implementation Conformance Statement (PICS).

The proforma RTS PICS contained in this Annex specifies the information to be supplied.

This information is needed for test case selection. Suppliers should note that tests will be performed to check that services shown as not supported are in fact not present rather than improperly implemented.

The RTS PICS is in three parts:

- Two parts requesting information concerning the support of RTS service primitives.

If primitives have only mandatory parameters they should be marked as "not supported" if any of their parameters are not supported.

- A part requesting information concerning the support of protocol elements.

Information on service element support is requested in tabular form where, for each service element,

- the status of the service element is indicated as mandatory (M), optional (O), conditional (C) or not applicable (-) in columns labelled "STD",
- the actual support of the service element by the implementation as initiator or responder is indicated by the supplier in columns labelled "IMP".

Information on protocol element support is requested in tabular form where, for each protocol element,

- the status of the protocol element where the IUT is initiator or responder is indicated as mandatory (M) or optional (O) in columns labelled "STD",
- any implementation constraints are indicated in the column labelled "CONST STD" where constraints are interpreted as a minimum for reception and a maximum for origination,
- the actual support of the protocol element by the implementation as initiator or responder is indicated by the supplier in the column labelled "STATUS IMP",
- the actual constraints of the implementation as initiator or responder are indicated by the supplier in the columns labelled "CONST IMP".

Constraints may be expressed as a length or size (octets, bits,...) or a value (32) depending on the element being constrained.

D.2 RTS PICS service primitives proforma

The requirements of the X.400 Recommendations are shown in the STD columns of the proforma using the following keys:

- M : Mandatory element
- O : Optional element

Suppliers of an implementation should use the IMP columns in the proforma to specify information concerning the support of service

elements. For convenience it is suggested that suppliers need only indicate with an "X" those service primitives that are not supported.

Table: D-1/X.403

D.3 RTS PICS service parameters proforma

RTS service parameters are mapped to Session and Presentation as below:

- The parameters of the OPEN.Request and the OPEN.Indication are mapped to the SCONNECT.Request and SCONNECT.Indication and to the corresponding PConnect.
- Responder/Initiator-address and Initial-turn are mapped to the SCONNECT.
- Dialogue-mode, Application-protocol and User-data are mapped to the PConnect.

- The parameters of the OPEN.Response and OPEN.Confirmation are all mapped to PAccept or PRefuse.

Since all OPEN service parameters are mapped to the PConnect protocol element (apart from Response-address and Initial-turn which are mandatory) there is an apparent duplication of information requested in Tables D-2/X.403 to D-5/X.403 with that requested in Table D-6/X.403.

Tables D-2/X.403 to D-5/X.403 are useful nevertheless because they make sure that all the mandatory parameters are really supported and because they make a static conformance review easier.

The requirements of the X.400 Recommendations are shown in the STD columns of the proforma using the following keys:

- M : Mandatory parameters
- O : Optional parameters
- C : Conditional parameters
- : Not applicable service parameters

Suppliers of an implementation should use the IMP columns in the proforma to specify information concerning the support of service elements. For convenience it is suggested that suppliers need only indicate with an "X" those service elements that are not supported.

Table: D-2/X.403

Table: D-3/X.403

Table: D-4/X.403

Table: D-5/X.403

D.4 RTS Protocol Elements

The requirements of the X.400 Recommendations are shown in the STATUS STD column of the proforma in table D-6/X.403 using the following keys:

- M : Mandatory element
- O : Optional element

The pragmatic constraints of the X.400 Implementor's Guide are shown in the CONS STD columns of the proforma in table D-6/X.403.

Suppliers of an implementation should use:

- the STATUS IMP column in the proforma to specify information concerning the support of protocol elements. For convenience it is suggested that suppliers need only indicate with an "X" those

protocol elements that are not supported.

- the CONS IMP columns in the proforma to specify the actual constraints of the implementation.

For some parameters only one value is applicable (e.g. DataTransferSyntax : 0). There are other parameters (e.g. checkpointSize, RefuseReason) that may vary under various circumstances and run-time conditions. This information is available in a PIXIT and in such cases a reference to the PIXIT normally can be made in the constraints-field, if the parameter is not fixed.

In a recovery, the SessionConnectionId is used in the PConnect and the PAccept. This SessionConnectionId may or may not be encoded according to X.409. This information is not important for the PICS because it is not a criterion for the Static Conformance Review or for the Test Case Selection and would normally be given in a PIXIT.

Table: D-6/X.403

Table: D-7/X.403

Table: D-8/X.403

Table: D-9/X.403