Broadband Integrated Services Digital Network (B-ISDN) and Broadband Private Integrated Services Network (B-PISN) - Digital Subscriber Signalling System No. two (DSS2), Broadband Inter-Exchange Signalling (B-QSIG), and Signalling System No. 7 (SS7) - Call Control in a Separated Call and Bearer Control Environment -Part 2: Protocol Implementation Conformance Statement (PICS) Proforma Specification

Broadband Integrated Services Digital Network (B-ISDN) and Broadband Private Integrated Services Network (B-PISN) - Digital Subscriber Signalling System No. two (DSS2), Broadband Inter-Exchange Signalling (B-QSIG), and Signalling System No. 7 (SS7) - Call Control in a Separated Call and Bearer Control Environment -Part 2: Protocol Implementation Conformance Statement (PICS) Proforma Specification

## **Brief History**

This Standard is one of a series of ECMA Standards defining services and signalling protocols applicable to Broadband Private Integrated Services Networks (B-PISNs). The series uses B-ISDN concepts as developed by ITU-T and conforms to the framework of International Standards for Open Systems Interconnection as defined by ISO/IEC.

This Standard has been produced by ECMA TC32-TG15 in collaboration with ETSI Technical Committee Signalling Protocols and Switching (SPS) under ETSI work item DEN/SPS-05132-2.

The Standard is part 2 of a multi-part standard covering the Digital Subscriber Signalling System No. 2 (DSS2), Broadband Inter-Exchange Signalling (B-QSIG), and Signalling System No. 7 (SS7) protocol specification for the Broadband Integrated Services Digital Network (B-ISDN) and Broadband Private Integrated Services Network (B-PISN) Call Control, as described below:

Part 1: "Protocol specification";

#### Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";

- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".

Part 3 and part 4 will only be produced by ETSI as EN 302 092-3 and EN 302 092-4 respectively.

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given Open Systems Interconnection (OSI) protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

The Standard is based upon the practical experience of ECMA member companies and the results of their active and continuous participation in the work of ISO/IEC JTC1, ITU-T, ETSI and other international and national standardization bodies. It represents a pragmatic and widely based consensus.

This ECMA Standard is technically aligned with EN 302 092-2 published by ETSI in November 1999.

This Standard has been adopted by the ECMA General Assembly of December 1999.

### Table of contents

1	Scope	1
2	Conformance	1
3	References	1
4	Definitions	1
4.1	Protocol Implementation Conformance Statement (PICS)	1
4.2	PICS proforma	2
5	Abbreviations	2
Annex	x A - PICS proforma for ECMA-294	3
Annex	x B - Requirements	13
Annex	x C - Bibliography	15



#### 1 Scope

This Standard is applicable to the Call Control protocol at the  $Q_B$ ,  $S_B$ ,  $T_B$  and co-incident  $S_B/T_B$  reference points within, between and at the access to Broadband Private Integrated Services Networks and within, between and at the access to public Broadband Integrated Services Digital Networks.

This Standard provides the Protocol Implementation Conformance Statement (PICS) proforma for the Call Control protocol as specified in ECMA-294 in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7.

### 2 Conformance

If it claims to conform to this Standard, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

A PICS which conforms to this Standard shall be a conforming PICS proforma completed in accordance with the guidance for completion given in clause A.1.

# 3 References

The following documents contain provisions which, through reference in this text, constitute provisions of this Standard.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.
- ECMA-254 Broadband Private Integrated Services Network (B-PISN) Inter-Exchange Signalling Protocol -Generic Functional Protocol (B-QSIG-GF)
- ECMA-294 Broadband Integrated Services Digital Network (B-ISDN) and Broadband Private Integrated Services Network (B-PISN) - Digital Subscriber Signalling System No. two (DSS2), Broadband Inter-Exchange Signalling (B-QSIG), and Signalling System No. 7 (SS7) - Call Control in a Separated Call and Bearer Control Environment - Part 1: Protocol Specification
- ISO/IEC 9646-1 Information technology Open Systems Interconnection Conformance testing methodology and framework Part 1: General concepts
- ISO/IEC 9646-7 Information technology Open Systems Interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements
- ETS 300 796-1 Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Generic functional protocol; Core aspects; Part 1: Protocol specification [ITU-T Rec. Q.2932.1 (1996), modified]

# 4 Definitions

For the purposes of this Standard, the following definitions apply, in addition to those given in ECMA-294.

## 4.1 **Protocol Implementation Conformance Statement (PICS)**

A statement made by the supplier of an Open Systems Interconnection (OSI) implementation or system, stating which capabilities have been implemented for a given OSI protocol (see ISO/IEC 9646-1).

#### - 2 -

# 4.2 PICS proforma

A document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which, when completed for an OSI implementation or system becomes the PICS (see ISO/IEC 9646-1).

# 5 Abbreviations

For the purposes of this Standard, the following abbreviations apply:

CC	Call Control
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
MC	Major Capabilities
MR	Messages Received
MT	Messages Transmitted
OSI	Open Systems Interconnection
Р	Parameters
PICS	Protocol Implementation Conformance Statement
R	Role
SC	Subsidiary Capabilities
SCS	System Conformance Statement
SUT	System Under Test
TM	Timers

#### Annex A

#### (normative)

## PICS proforma for ECMA-294

## A.1 Guidance for completing the PICS proforma

#### A.1.1 Purposes and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in ECMA-294 may provide information about the implementation in a standardized manner.

The PICS proforma is subdivided into subclauses for the following categories of information:

- guidance for completing the PICS proforma;
- identification of the implementation;
- identification of the protocol;
- global statement of conformance;
- Roles;
- Major capabilities;
- Subsidiary capabilities;
- Application protocol data units;
- APDU parameters;
- Timers.

#### A.1.2 Abbreviations and conventions

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7.

#### Item column

The item column contains a number which identifies the item in the table.

#### Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

#### Status column:

The following notations, defined in ISO/IEC 9646-7, are used for the status column:

- m mandatory the capability is required to be supported.
- o optional the capability may be supported or not.
- n/a not applicable in the given context, it is impossible to use the capability.
- o.i qualified optional for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.
- c.i conditional the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table.

#### **Reference column:**

The reference column makes reference to ECMA-294, except where explicitly stated otherwise.

#### Support column:

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7, are used for the support column:

Y or y supported by the implementation.

N or n not supported by the implementation.

N/A, n/a or - no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status).

If this PICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (e.g. ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE\_: ?3: IF prof1 THEN Y ELSE N

NOTE

As stated in ISO/IEC 9646-7, support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

### A.1.3 Instructions for completing the PICS proforma

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support column boxes provided, using the notation described in subclause A.1.2.

If necessary, the supplier may provide additional comments in space at the bottom of the tables or separately.

More detailed instructions are given at the beginning of the different subclauses of the PICS proforma.

### A.2 Identification of the implementation

Identification of the Implementation Under Test (IUT) and the system in which it resides (the System Under Test (SUT)) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

#### A.2.1 Date of the statement

# A.2.2 Implementation Under Test (IUT) identification

#### IUT name:

IUT version:

# A.2.3 System Under Test (SUT) identification

SUT name:
Hardware configuration:
Operating system:
A.2.4 Product supplier Name:
Address:
Telephone number:
Facsimile number:
E-mail address:
Additional information:
A.2.5 Client Name:
Address:
Telephone number:
Facsimile number:

E-mail address: Additional information: A.2.6 PICS contact person Name: Address:

Telephone number:

Facsimile number:

Additional information:

# A.3 Identification of the protocol

This PICS proforma applies to the following standard:

ECMA-294 Broadband Integrated Services Digital Network (B-ISDN) and Broadband Private Integrated Services Network (B-PISN) - Digital Subscriber Signalling System No. two (DSS2), Broadband Inter-Exchange Signalling (B-QSIG), and Signalling System No. 7 (SS7) - Call Control in a Separated Call and Bearer Control Environment - Part 1: Protocol Specification

# A.4 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No) .....

NOTE

Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming, on pages attached to the PICS proforma.

### Table A.1 - Roles

Item	Role	References	Condition	Status	Support
R1	Support of Call Control in an originating CC entity	6.1		0.1	Yes[ ] No[ ]
R2	Support of Call Control in a terminating CC entity	6.1		0.1	Yes[ ] No[ ]
R3	Support of Call Control in a transit CC entity	6.1		o.1	Yes[ ] No[ ]

o.1 Support of at least one of these options is required.

# A.6 Major Capabilities

A.5

Roles

Table A.2 - Major Capabilities

Item	Question/feature (Does the implementation ?)	References	Condition	Status	Support
MC1	Support signalling procedures for call establishment request when acting as a preceding CC entity	9.1.1	R1 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC2	Support signalling procedures for call establishment request when acting as a succeeding CC entity	9.1.2	R2 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC3	Support two message sequence for call establishment	9.1, 9.3	MC1 OR MC2	m	Yes[ ] No[ ] N/A[ ]
MC4	Support three message sequence for call establishment	9.1, 9.3	MC1 MC2	o m	Yes[ ] No[ ] N/A[ ]
MC5	Support signalling procedures for call proceeding when acting as a preceding CC entity	9.2.1	R1 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC6	Support signalling procedures for call proceeding when acting as a succeeding CC entity	9.2.2	R2 R3	o m	Yes[ ] No[ ] N/A[ ]
MC7	Support signalling procedures for call acceptance when acting as a preceding CC entity	9.3.1	R1 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC8	Support signalling procedures for call acceptance when acting as a succeeding CC entity	9.3.2	R2 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC9	Support signalling procedures for completion of call establishment when acting as a preceding CC entity	9.4.1	MC4	m	Yes[ ] No[ ] N/A [ ]
MC10	Support signalling procedures for completion of call establishment when acting as a succeeding CC entity	9.4.2	MC4	m	Yes[ ] No[ ] N/A [ ]

Item	<b>Question/feature</b> (Does the implementation ?)	References	Condition	Status	Support
MC11	Support signalling procedures for call status change report when acting as an initiating CC	9.5.1	R1 OR R2	0	Yes[ ] No[ ]
	entity				N/A[ ]
MC12	Support signalling procedures for call status change report when acting as a receiving CC entity	9.5.2	R1 OR R2	m	Yes[ ] No[ ] N/A[ ]
MC13	Support signalling procedures for call clearing	9.7	R1 OR R2 OR R3	m	Yes[ ] No[ ] N/A[ ]
1014					
MC14	Support bearer co-ordination requirements when acting as a CC entity that establishes a bearer towards an adjacent CC entity	A.1	R1 OR R2 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC15	Support bearer co-ordination requirements when acting as a CC entity that receives a bearer establishment from an adjacent CC entity	A.2	R1 OR R2 OR R3	m	Yes[ ] No[ ] N/A[ ]
MC16	Support additional bearer co-ordination requirements when acting as a transit CC entity	A.3	R3	m	Yes[ ] No[ ] N/A[ ]
MC17	Support bearer co-ordination requirements on call clearing	A.4	R1 OR R2 OR R3	m	Yes[] No[] N/A[]
MC18	Support Call Description handling at a CC signalling service user within an originating CC entity	B.1	R1	m	Yes[ ] No[ ] N/A[ ]
MC19	Support Call Description handling at a CC signalling service user within a transit CC entity	В.2	R3	m	Yes[ ] No[ ] N/A[ ]
MC20	Support Call Description handling at a CC signalling service user within a terminating CC entity	В.3	R2	m	Yes[ ] No[ ] N/A[ ]
MC21	Support interworking procedures in case of outgoing call establishment to networks not supporting separation of call and bearer control	C.1.1	R3	0	Yes[ ] No[ ] N/A [ ]
MC22	Support interworking procedures in case of incoming bearer establishment from networks not supporting separation of call and bearer control	C.1.2	R3	0	Yes[ ] No[ ] N/A [ ]
MC23	Support interworking procedures in case of addition of bearers to a call with networks not supporting separation of call and bearer control	C.1.3	R3	0	Yes[ ] No[ ] N/A [ ]
MC24	Support interworking procedures in case of outgoing call establishment to networks which only support simultaneous call and bearer establishment	C.2.1	R3	0	Yes[ ] No[ ] N/A [ ]

Item	<b>Question/feature</b> (Does the implementation ?)	References	Condition	Status	Support
MC25	Support interworking procedures in case of incoming call and bearer establishment from networks which only support simultaneous call and bearer establishment	C.2.2	R3	0	Yes[ ] No[ ] N/A [ ]
MC26	Support interworking procedures in case of addition of bearers to a call with networks which only support simultaneous call and bearer establishment	C.2.3	R3	0	Yes[ ] No[ ] N/A [ ]
MC27	Support connection oriented – bearer independent (CO-BI) transport mechanism	D.1		0.2	Yes[ ] No[ ]
MC28	Support connectionless – bearer independent (CL-BI) transport mechanism	D.2		0.2	Yes[ ] No[ ]
MC29	Support a reliable transport mechanism which is not listed in ECMA-294	D		0.2	Yes[ ] No[ ]

o.2 Support of at least one of these options is required.

# A.7 Subsidiary Capabilities

Table A.3 -	Subsidiary	Capabilities
-------------	------------	--------------

Item	Question/feature	References	Condition	Status	Support
	(Does the implementation ?)				
SC1	Support signalling procedures for call establishment failure when acting as a	9.6.1	R1 OR R3	m	Yes[ ] No[ ]
	preceding CC entity				N/A[ ]
SC2	Support signalling procedures for call establishment failure when acting as a	9.6.2	R2 OR R3	m	Yes[ ] No[ ]
	succeeding CC entity				N/A[ ]
SC3	Support exceptional procedures on timer expiry when acting as a preceding CC entity	9.8.1.1	R1 OR R3	m	Yes[ ] No[ ]
	expiry when acting as a preceding ce chury				N/A[ ]
SC4	Support exceptional procedures on timer expiry when acting as a succeeding CC entity	9.8.1.2	R2 OR R3	m	Yes[ ] No[ ]
	expiry when acting as a succeeding CC entry				N/A[ ]
SC5	Support exceptional procedures on timer expiry when acting as a CC entity that initiated	9.8.1.3	MC13	m	Yes[ ] No[ ]
	call clearing				N/A[ ]
SC6	Support exceptional procedures on receipt of APDUs with unknown Call Segment Id when	9.8.2	MC2	m	Yes[ ] No[ ]
	acting as a succeeding CC entity				N/A[ ]
SC7	Support exceptional procedures on receipt of	9.8.3	MC2	m	Yes[ ] No[ ]
	APDUs with duplicated Call Segment Id when acting as a succeeding CC entity				N/A[]
SC8	Support exceptional procedures on receipt of	9.8.4	MC7	m	Yes[ ] No[ ]
	APDUs out of sequence when acting as a preceding CC entity				N/A[]

Item	Question/feature (Does the implementation ?)	References	Condition	Status	Support
SC9	Support exceptional procedures on receipt of reject APDUs	9.8.5	MC1 OR MC2	m	Yes[ ] No[ ] N/A[ ]
SC10	Support procedures for the handling of unrecognized parameters within CC- Operations	9.8.6	MC1 OR MC2	m	Yes[ ] No[ ] N/A[ ]
SC11	Support changes to the information model at a CC signalling service user within an initiating CC entity	B.4	MC11	m	Yes[ ] No[ ] N/A[ ]
SC12	Support changes to the information model at a CC signalling service user within a receiving CC entity	B.4	MC12	m	Yes[ ] No[ ] N/A[ ]

# A.8 Application protocol data units

Table A	4.4 -	APDUs	transmitted
---------	-------	-------	-------------

Item	Question/feature	References	Condition	Status	Support
MT1	Sending of callEstablish invoke	9.1.1	MC1	m	Yes[ ] No[ ] N/A[ ]
MT2	Sending of callProceeding invoke	9.2.2	MC6	m	Yes[ ] No[ ] N/A[ ]
MT3	Sending of callComplete invoke	9.4.1	MC9	m	Yes[ ] No[ ] N/A[ ]
MT4	Sending of callStatus invoke	9.5.1	MC11	m	Yes[ ] No[ ] N/A[ ]
MT5	Sending of callRelease invoke	9.7.1	MC13	m	Yes[ ] No[ ] N/A[ ]
MT6	Sending of callEstablish return result/error	9.3.2 / 9.6.2	MC8 / SC2	m	Yes[ ] No[ ] N/A[ ]
MT7	Sending of callRelease return result	9.7.2	MC13	m	Yes[ ] No[ ] N/A[ ]

Item	Question/feature	References	Condition	Status	Support
MR1	Receipt of callEstablish invoke	9.1.2	MC2	m	Yes[ ] No[ ] N/A[ ]
MR2	Receipt of callProceeding invoke	9.2.1	MC5	m	Yes[ ] No[ ] N/A[ ]
MR3	Receipt of callEstablish return result/error	9.3.1 / 9.6.1	MC7 / SC1	m	Yes[ ] No[ ] N/A[ ]
MR4	Receipt of callComplete invoke	9.4.2	MC10	m	Yes[ ] No[ ] N/A[ ]
MR5	Receipt of callStatus invoke	9.5.2	MC12	m	Yes[ ] No[ ] N/A[ ]
MR6	Receipt of callRelease return result	9.7.1	MC13	m	Yes[ ] No[ ] N/A[ ]
MR7	Receipt of callRelease invoke	9.7.2	MC13	m	Yes[ ] No[ ] N/A[ ]
MR8	Receipt of a reject APDU correlated to a callEstablish invoke	9.8.5.1	MC1	m	Yes[ ] No[ ] N/A[ ]
MR9	Receipt of a reject APDU correlated to a callProceeding invoke	9.8.5.2	MC6	m	Yes[ ] No[ ] N/A[ ]
MR10	Receipt of a reject APDU correlated to a callComplete invoke	9.8.5.3	MC9	m	Yes[ ] No[ ] N/A[ ]
MR11	Receipt of a reject APDU correlated to a callStatus invoke	9.8.5.4	MC11	m	Yes[ ] No[ ] N/A[ ]
MR12	Receipt of a reject APDU correlated to a callRelease invoke	9.8.5.5	MC13	m	Yes[ ] No[ ] N/A[ ]
MR13	Receipt of a reject APDU correlated to a callEstablish return result	9.8.5.6	MC2	m	Yes[ ] No[ ] N/A[ ]
MR14	Receipt of a reject APDU correlated to a callEstablish return error	9.8.5.7	MC2	m	Yes[ ] No[ ] N/A[ ]
MR15	Receipt of a reject APDU correlated to a callRelease return result	9.8.5.8	MC13	m	Yes[ ] No[ ] N/A[ ]

Table A.5 - APDUs received

# A.9 APDU Parameters

Item	<b>Question/feature</b> (Does the implementation ?)	References	Condition	Status	Support
P1	Support inclusion of bearerEstablAddress in callEstablish return result	8.1, 9.3.2, A.1	MT6	m	Yes[ ] No[ ] N/A[ ]
P2	Support inclusion of an alternative callDescription in callEstablish return error	8.1, 9.6.2, B.3	MT6	0	Yes[ ] No[ ] N/A[ ]
P3	Support inclusion of an end-to-end relevant part within callDescription	8.1, B.1	MT1	0	Yes[ ] No[ ] N/A[ ]
P4	Support inclusion of a modified end-to-end relevant part within callChangedParameter	8.1, B.4	MT4	0	Yes[ ] No[ ] N/A[ ]
P5	Support inclusion of a bearerIdList within callDescription	8.3, A.1	MT1	0	Yes[ ] No[ ] N/A[ ]
P6	Support inclusion of service components within callDescription	8.3, B.1	MT1	0	Yes[ ] No[ ] N/A[ ]

# Table A.6 - APDU Parameters

# A.10 Timers

Table A.7 - Timers

Item	Question/feature	References	Condition	Status	Value	Support
TM1	Support of timer T703 by a preceding CC entity	10	R1 OR R2	m	3s – 15s	Yes[ ] No[ ] N/A[ ]
TM2	Support of timer T708 by a preceding CC entity	10	R1 OR R2	m	30s	Yes[ ] No[ ] N/A[ ]
TM3	Support of timer T708 by a succeeding CC entity	10	R1 OR R2	m	30s	Yes[ ] No[ ] N/A[ ]
TM4	Support of timer T710 by a preceding CC entity	10	R1 OR R2	m	30s	Yes[ ] No[ ] N/A[ ]
TM5	Support of timer T701 by a succeeding CC entity	10	R1 OR R2	m	180s	Yes[ ] No[ ] N/A[ ]

### Annex B

(normative)

# Requirements

This annex lists requirements to the transport mechanisms and some items of the generic functional protocol as specified in ETS 300 796-1 for the  $S_B$  and coincident  $S_B/T_B$  reference point or in ECMA-254 for the  $Q_B$  reference point required for the support of ECMA-294.

Table B.1	- Major	Capabilities	

Item	Question/feature (Does the implementation ?)	References	Condition	Status	Support
MC30	Support connection oriented – bearer independent (CO-BI) transport mechanism at the $S_B$ and coincident $S_B/T_B$ reference point	D.1		0.3	Yes[ ] No[ ]
MC31	Support connection oriented – bearer independent (CO-BI) transport mechanism at the $Q_B$ reference point	D.1		0.3	Yes[ ] No[ ]
MC32	Support connectionless – bearer independent (CL-BI) transport mechanism at the $S_B$ and coincident $S_B/T_B$ reference point	D.2		0.3	Yes[ ] No[ ]
MC33	Support connectionless – bearer independent (CL-BI) transport mechanism at the $Q_B$ reference point	D.2		0.3	Yes[ ] No[ ]
MC34	Support a reliable transport mechanism which is not listed in ECMA-294	D		0.3	Yes[ ] No[ ]

o.3 Support of at least one of these options is required.

#### Table B.2 - Subsidiary Capabilities

Item	<b>Question/feature</b> (Does the implementation ?)	References	Condition	Status	Support
SC13	Support coding of CC operations in the Facility information element as specified in ETS 300 796-1 or ECMA-254	D.1, D.2	MC1 OR MC2 OR MC3 OR MC4	m	Yes[ ] No[ ] N/A[ ]
SC14	Support coding of the instruction indicator in the Facility information element as specified in ETS 300 796-1 or ECMA-254	D.1, D.2	MC1 OR MC2 OR MC3 OR MC4	m	Yes[ ] No[ ] N/A[ ]
SC15	Support sending of the Facility information element in the messages for the CO-BI transport mechanism as specified in ETS 300 796-1 or ECMA-254	D.1	MC1 OR MC2	m	Yes[ ] No[ ] N/A[ ]

Item	<b>Question/feature</b> (Does the implementation ?)	References	Condition	Status	Support
SC16	Support coding of the instruction indicator in the messages for the CO-BI transport mechanism as specified in ETS 300 796-1 or ECMA-254	D.1	MC1 OR MC2	m	Yes[ ] No[ ] N/A[ ]
SC17	Support sending of the Facility information element in the FACILITY message for the CL- BI transport mechanism as specified in ETS 300 796-10r ECMA-254	D.2	MC3 OR MC4	m	Yes[ ] No[ ] N/A[ ]
SC18	Support coding of the instruction indicator in the FACILITY message for the CL-BI transport mechanism as specified in ETS 300 796-10r ECMA-254	D.2	MC3 OR MC4	m	Yes[ ] No[ ] N/A[ ]
SC19	Support inclusion of the NFE when conveying an invoke APDU of the CC operations	D.1, D.2	MC2 OR MC4	0	Yes[ ] No[ ] N/A[ ]
SC20	Support inclusion of the Interpretation APDU when conveying an invoke APDU of the CC operations	D.1, D.2	MC2 OR MC4	0	Yes[ ] No[ ] N/A[ ]

# Annex C

(informative)

# Bibliography

ETS 300 406 Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology

Free printed copies can be ordered from: **ECMA** 114 Rue du Rhône CH-1204 Geneva Switzerland

Fax: +41 22 849.60.01 Email: documents@ecma.ch

Files of this Standard can be freely downloaded from the ECMA web site (www.ecma.ch). This site gives full information on ECMA, ECMA activities, ECMA Standards and Technical Reports.

**ECMA** 114 Rue du Rhône CH-1204 Geneva Switzerland

See inside cover page for obtaining further soft or hard copies.