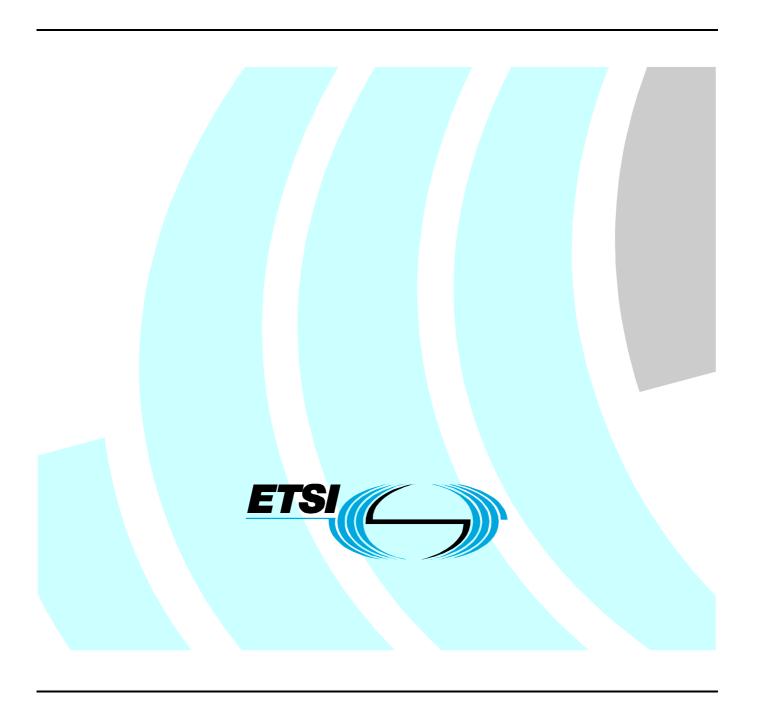
# ETSI EN 301 815-2 V1.1.1 (2002-07)

European Standard (Telecommunications series)

Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
Quality of Service class and parameters indication
at call/connection establishment;
Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification

[ITU-T Recommendations Q.2965.1B (2000) and Q.2965.2B (2000), modified]



#### Reference

#### DEN/SPAN-130251-2

#### Keywords

ATM, B-ISDN, DSS2, PICS, quality, endorsement

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### **Foreword**

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 2 of a multi-part deliverable covering the Digital Subscriber Signalling System No. two (DSS2) protocol specification for the Broadband Integrated Services Digital Network (B-ISDN) to support Quality of Service class and parameters indication at call/connection establishment, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendations Q.2965.1 (1999) and Q.2965.2 (1999), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification [ITU-T Recommendations Q.2965.1B and Q.2965.2B modified]";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

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 protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS). The Protocol specification, part 1 of the present document, extends the basic call control procedures defined in EN 300 443-1 [7] by supporting the connection characteristics (Quality of Service class, End-to-end transit delay) indication.

National transposition dates						
Date of adoption of this EN:	12 July 2002					
Date of latest announcement of this EN (doa):	31 October 2002					
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 April 2003					
Date of withdrawal of any conflicting National Standard (dow):	30 April 2003					

## **Endorsement notice**

The elements of ITU-T Recommendation Q.2965.1B (2000) and ITU-T Recommendation Q.2965.2B (2000) apply, with the following modifications.

# Modifications to ITU-T Recommendation Q.2965.1B

Clause 1 (Scope)

Replace the text with:

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the Broadband Integrated Services Digital Network (B-ISDN) Digital Subscriber Signalling System No. two (DSS2) protocol specification for support of Quality of Service class and parameters indication at call/connection establishment defined in EN 301 815-1 [9] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [6] and ETS 300 406 [10].

The supplier of a protocol implementation which is claimed to conform to EN 301 815-1 [9] is required to complete a copy of the PICS proforma provided in annex A of the present document and is required to provide the information necessary to identify the supplier and the implementation.

Further ENs (or further parts of the present document) provide the method of testing and detailed application specific requirements to determine conformance to the present document.

The provision of this capability requires the support of the protocol for the basic point-to-point call/bearer connections as defined in EN 300 443-1 [7] or of the protocol for the point-to-multipoint call/bearer connections as defined in EN 300 771-1 [8].

#### Clause 2 (Normative references), first paragraph

Replace the first paragraph with:

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

#### Clause 2, end

Add the following references at the end of clause 2:

[7]	ETSI EN 300 443-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital
	Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3
	specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation
	Q.2931 (1995), modified]".

- [8] ETSI EN 300 771-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for point-to-multipoint call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2971 (1995), modified]".
- [9] ETSI EN 301 815-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Quality of Service Class and Parameters indication at call/connection establishment; Part 1: Protocol specification [ITU-T Recommendations Q.2965.1 (1999) and Q.2965.2 (1999), modified]".

[10] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

Throughout the text of ITU-T Recommendation Q.2965.1B

Replace references as shown in the following table.

Reference in ITU-T Recommendation Q.2965.1B	Modified reference
ITU-T Recommendation Q.2931 [2]	ITU-T Recommendation Q.2931 as modified by EN 300 443-1 [7]
ITU-T Recommendation Q.2965.1 [1]	ITU-T Recommendation Q.2965.1 as modified by EN 301 815-1 [9]

#### Annex A

Table A.2/Q.2965.1B (Major capabilities of the user role)

Replace table A.2/Q.2965.1B with the following table.

Table A.2: Major capabilities of the user role

Major capability: Does the implementation support	Conditions for status	Status	Reference	Support
Call establishment at the originating interface				
outgoing calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?  Call establishment at the destination		O.2	9.1, 10, annex A	[]Yes []No
interface				
incoming calls with the analysis of the QoS parameter information element in SETUP messages?		O.2	9.2, 10 annex A	[]Yes []No
ort of at least one of these options is mandatory	,	•		
	Does the implementation support  Call establishment at the originating interface  outgoing calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?  Call establishment at the destination interface incoming calls with the analysis of the QoS parameter information element in SETUP messages?	Does the implementation support  Call establishment at the originating interface  outgoing calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?  Call establishment at the destination interface  incoming calls with the analysis of the QoS parameter information element in SETUP	Does the implementation support  Call establishment at the originating interface  outgoing calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?  Call establishment at the destination interface  incoming calls with the analysis of the QoS parameter information element in SETUP messages?  for status  O.2	Does the implementation support  Call establishment at the originating interface  outgoing calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?  Call establishment at the destination interface  incoming calls with the analysis of the QoS parameter information element in SETUP messages?  for status  O.2  9.1, 10, annex A

Table A.5/Q.2965.1B (Major capabilities of the network role)

Replace table A.5/Q.2965.1B with the following table.

Table A.5: Major capabilities of the network role

Item	Major capability: Does the implementation support	Conditions for status	Status	Reference	Support
	Call establishment at the originating interface				
MCn1	outgoing calls with the analysis of the QoS parameter information element in SETUP messages?		М	9.1, 10, annex A	[]Yes[]No
	Call establishment at the destination interface				
MCn2	incoming calls with the inclusion in SETUP messages of a QoS parameter information element with QoS class values in valid combination with bearer class, broadband transfer capability and ATM traffic descriptor parameters?		М	9.2, 10, annex A	[]Yes []No
Comments:					

## Modifications to ITU-T Recommendation Q.2965.2B

#### Clause 1 (Scope)

#### Replace text with:

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the Broadband Integrated Services Digital Network (B-ISDN) Digital Subscriber Signalling System No. two (DSS2) protocol specification for support of Quality of Service Class and parameters indication at call/connection establishment defined in EN 301 815-1 [9] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [6] and ETS 300 406 [10].

The supplier of a protocol implementation which is claimed to conform to EN 301 815-1 [9] is required to complete a copy of the PICS proforma provided in annex A of the present document and is required to provide the information necessary to identify the supplier and the implementation.

Further ENs (or further parts of the present document) provide the method of testing and detailed application specific requirements to determine conformance to the present document.

The provision of this capability requires the support of the protocol for the basic point-to-point call/bearer connections as defined in EN 300 443-1 [7] or of the protocol for the point-to-multipoint call/bearer connections as defined in EN 300 771-1 [8].

#### Clause 2 (Normative references), first paragraph

Replace the first paragraph with:

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

#### Clause 2, end

Add the following references at the end of clause 2:

[7]	ETSI EN 300 443-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
[8]	ETSI EN 300 771-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for point-to-multipoint call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2971 (1995), modified]".
[9]	ETSI EN 301 815-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Quality of Service Class and Parameters indication at call/connection establishment; Part 1: Protocol specification [ITU-T Recommendations Q.2965.1 (1999) and Q.2965.2 (1999), modified]".
[10]	ETSI ETS 300 406: "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

Throughout the text of ITU-T Recommendation Q.2965.2B

Replace references as shown in the following table.

Reference in ITU-T Recommendation Q.2965.2B	Modified reference
ITU-T Recommendation Q.2931 [2]	ITU-T Recommendation Q.2931 as modified by EN 300 443-1 [7]
ITU-T Recommendation Q.2965.2 [1]	ITU-T Recommendation Q.2965.2 as modified by EN 301 815-1 [9]

#### Annex A

Table A.2/Q.2965.2B (Major capabilities of the user role)

Replace table A.2/Q.2965.2B with the following table.

Table A.2: Major capabilities

Item	Major capability:	Conditions	Status	Reference	Support
	Does the implementation support	for status			
	Call establishment at the originating interface				
MCu1	outgoing calls with the inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?		0	9.1.1, annex A	[ ]Yes [ ]No
MCu2	outgoing calls with the inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?	R1.2 NOT R1.2	O N/A	10.1.1, annex A	[ ]Yes [ ]No [ ]N/A
	Call establishment at the destination interface				
Mcu3.1	incoming calls with the analysis of the End-to-end transit delay information element in SETUP messages?		М	9.2.1, annex A	[ ]Yes [ ]No
MCu3.2	incoming calls with the inclusion in CONNECT messages of an End-to-end transit delay information element?		0	9.2.2, 10.2.2	[ ]Yes [ ]No
Mcu4.1	incoming calls with the analysis of the Extended QoS parameter information element in SETUP messages?	R1.2 NOT R1.2	M N/A	10.2.1, annex A	[ ]Yes [ ]No [ ]N/A
MCu4.2	incoming calls with the inclusion in CONNECT messages of an Extended QoS parameter information element?	R1.2 NOT R1.2	O N/A	10.2.2	[ ]Yes [ ]No [ ]N/A

## Clause A.7.2 (Subsidiary capabilities)

Insert the following table and re-number all following tables accordingly.

Table A.3: Subsidiary capabilities

Item	Subsidiary capability: Does the implementation	Conditions for status	Status	Reference	Support
SCu1	set the maximum end-to-end transit delay in outgoing SETUP messages to the value "any end-to-end transit delay value acceptable, deliver cumulative end-to-end transit delay value to called user"?	MCu1 NOT MCu1	O N/A	8.2.1, 9.1.1	[ ]Yes [ ]No [ ]N/A
SCu2	update the cumulative transit delay value received in a SETUP message to account for expected increases?		0	9.2.1	[ ]Yes [ ]No
SCu3	reject an incoming call, if the updated cumulative transit delay value exceeds the received maximum transit delay value?	SCu2 NOT SCu2	O N/A	9.2.1	[ ]Yes [ ]No [ ]N/A

Comments:

Table A.11/Q.2965.2B (Major capabilities of the network role)

Replace table A.11/Q.2965.2B with the following table.

Table A.8: Major capabilities

Major capability: Does the implementation	Conditions for status	Status	Reference	Support
Call establishment at the originating interface				
analysis of the End-to-end transit delay information element in SETUP messages?		М	9.1.1, annex A, annex B	[ ]Yes [ ]No
inclusion in CONNECT messages of an End-to-end transit delay information element?		М	9.1.2, 10.1.2	[ ]Yes [ ]No
1	R2.2 NOT R2.2	M N/A	10.1.1, annex A, annex B	[ ]Yes [ ]No [ ]N/A
inclusion in CONNECT messages of an Extended QoS parameter information element?	R2.2 NOT R2.2	M N/A	10.1.2	[ ]Yes [ ]No [ ]N/A
Call establishment at the destination interface				
inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?		М	9.2.1, annex A	[ ]Yes [ ]No
analysis of the End-to-end transit delay information element in CONNECT messages?		М	9.2.2, 10.2.2, annex B	[ ]Yes [ ]No
inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?	R2.2 NOT R2.2	M N/A	10.2.1, annex A	[ ]Yes [ ]No [ ]N/A
J	R2.2 NOT R2.2	M N/A	10.2.2, annex B	[ ]Yes [ ]No [ ]N/A
	Call establishment at the originating interface  analysis of the End-to-end transit delay information element in SETUP messages? inclusion in CONNECT messages of an End-to-end transit delay information element?  analysis of the Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element?  Call establishment at the destination interface  inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?  analysis of the End-to-end transit delay information element in CONNECT messages?  inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?	Call establishment at the originating interface  analysis of the End-to-end transit delay information element in SETUP messages? inclusion in CONNECT messages of an End-to-end transit delay information element?  analysis of the Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element?  Call establishment at the destination interface  inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?  analysis of the End-to-end transit delay information element in CONNECT messages?  inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?	Call establishment at the originating interface  analysis of the End-to-end transit delay information element in SETUP messages?  inclusion in CONNECT messages of an End-to-end transit delay information element?  analysis of the Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element?  Call establishment at the destination interface  inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?  analysis of the End-to-end transit delay information element in CONNECT messages?  inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?	Does the implementation  Call establishment at the originating interface  analysis of the End-to-end transit delay information element in SETUP messages? inclusion in CONNECT messages of an End-to-end transit delay information element?  analysis of the Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element in SETUP messages?  inclusion in CONNECT messages of an Extended QoS parameter information element?  Call establishment at the destination interface  inclusion in SETUP messages of an End-to-end transit delay information element with values in valid combination with bearer class, broadband transfer capability ATM traffic descriptor and QoS parameters?  analysis of the End-to-end transit delay information element in CONNECT messages?  inclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?  finclusion in SETUP messages of an Extended QoS parameter information element with values in valid combination with bearer class, broadband transfer capability and QoS class?

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## Clause A.8.2 (Subsidiary capabilities)

Insert the following table and re-number all following tables accordingly.

Table A.12: Subsidiary capabilities

Item	Subsidiary capability: Does the implementation	Conditions for status	Status	Reference	Support
SCn1	automatically generate an end-to-end transit delay information element for inclusion in SETUP messages? (see note)	R2.2 NOT R2.2	O N/A	10.2.1, annex B	[ ]Yes [ ]No [ ]N/A
SCn2	automatically generate an Extended QoS parameters information element for inclusion in SETUP messages? (see note)	R2.2 NOT R2.2	O N/A	10.2.1, annex B	[ ]Yes [ ]No [ ]N/A
NOTE:	This may be necessary, if no End-to-end transit of the setup indication.	delay/Extended	QoS param	eters informatio	n was received in

Comments:

# History

Document history			
V1.1.1	December 2001	Public Enquiry	PE 20020419: 2001-12-19 to 2002-04-19
V1.1.1	May 2002	Vote	V 20020712: 2002-05-13 to 2002-07-12
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