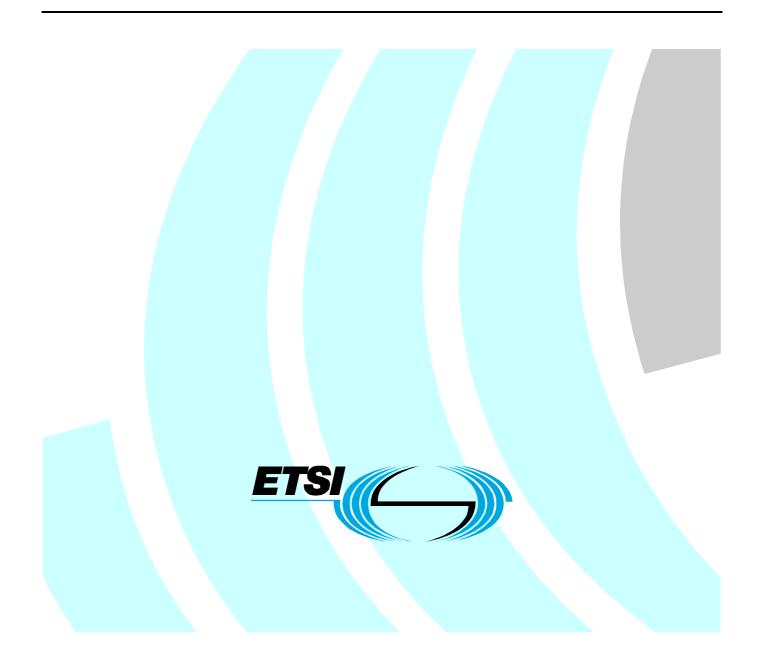
# Draft ETSI EN 301 815-2 V1.1.1 (2001-12)

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

[Endorsement of ITU-T Recommendations Q.2965.1bis and Q.2965.2bis modified]



Reference DEN/SPAN-130251-2

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# Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN), and is now submitted for the Public Enquiry phase of the ETSI standards Two-step Approval Procedure.

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 [Endorsement of ITU-T Recommendations Q.2965.1bis and Q.2965.2bis 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 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.

| Proposed national transposition dates  |                                 |  |  |  |
|--|---------------------------------|--|--|--|
| Date of latest announcement of this EN (doa):  | 3 months after ETSI publication |  |  |  |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 6 months after doa              |  |  |  |
| Date of withdrawal of any conflicting National Standard (dow):                         | 6 months after doa              |  |  |  |

# **Endorsement notice**

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

# Modifications to ITU-T Recommendation Q.2965.1bis

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 [5] and ETS 300 406 [10].

The supplier of a protocol implementation which is claimed to conform to EN 301 815-1 [8] 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 (V1.3): "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.2965.1bis

Replace references as shown in the following table.

| Reference in<br>ITU-T Recommendation Q.2965.2 | 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.2965.1bis (Major capabilities of the user role)

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

| Table A.2: Ma | ior capabilities | of the user role |
|---------------|------------------|------------------|
|               |                  | •••••••••••••••  |

| ltem      | Major capability:<br>Does the implementation support   | Conditions<br>for status | Status | Reference           | Support      |
|-----------|--|--------------------------|--------|---------------------|--------------|
|           | Call establishment at the originating<br>interface   |                          |        |                     |              |
| MCu1      | outgoing calls with the inclusion in SETUP<br>messages of a QoS parameter information<br>element with QoS class values in valid<br>combination with bearer class, broadband<br>transfer capability and ATM traffic descriptor<br>parameters? |                          | 0.2    | 9.1, 10,<br>annex A | [ ]Yes [ ]No |
|           | Call establishment at the destination<br>interface   |                          |        |                     |              |
| MCu2      | incoming calls with the analysis of the QoS<br>parameter information element in SETUP<br>messages?   |                          | 0.2    | 9.2, 10<br>annex A  | [ ]Yes [ ]No |
| O.2 Sup   | port of at least one of these options is mandatory   | /                        |        |                     |              |
| Comments: | :  |                          |        |                     |              |

### Table A.2/Q.2965.5bis (Major capabilities of the network role)

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

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

# Table A.5: Major capabilities of the network role

# Modifications to ITU-T Recommendation Q.2965.2bis

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 [5] and ETS 300 406 [10].

The supplier of a protocol implementation which is claimed to conform to EN 301 815-1 [8] 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 (V1.3): "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.2965.1bis

Replace references as shown in the following table.

| Reference in<br>ITU-T Recommendation Q.2965.2 | 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.2965.2bis (Major capabilities of the user role)

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

### Table A.2: Major capabilities

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

# Clause A.7.2 (Subsidiary capabilities)

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

| Table A.3: | Subsidiary | capabilities |
|------------|------------|--------------|
| Table A.3: | Subsidiary | capabilities |

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

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

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

| s the implementation<br>establishment at the originating<br>face<br>vsis of the End-to-end transit delay<br>mation element in SETUP messages?<br>sion in CONNECT messages of an End-<br>d transit delay information element?<br>vsis of the Extended QoS parameter<br>nation element in SETUP messages? | for status   | M   | 9.1.1, annex A,<br>annex B<br>9.1.2, 10.1.2   |  |
|---|--|---|---|--|
| face<br>vsis of the End-to-end transit delay<br>nation element in SETUP messages?<br>sion in CONNECT messages of an End-<br>id transit delay information element?<br>vsis of the Extended QoS parameter   |  |   | annex B   |  |
| vsis of the End-to-end transit delay<br>nation element in SETUP messages?<br>sion in CONNECT messages of an End-<br>id transit delay information element?<br>vsis of the Extended QoS parameter   |  |   | annex B   |  |
| sion in CONNECT messages of an End-<br>d transit delay information element?<br>/sis of the Extended QoS parameter   |  | М   |   |  |
|   |  |   | , -   | [ ]Yes [ ]No   |
|   | NOT R2.2   | M<br>N/A  |   | [ ] Yes [ ] No<br>[ ]N/A   |
| sion in CONNECT messages of an<br>nded QoS parameter information<br>ent?  | R2.2<br>NOT R2.2   | M<br>N/A  |   | [ ]Yes [ ]No<br>[ ]N/A   |
| establishment at the destination<br>face  |  |   |   |  |
| sion in SETUP messages of an End-to-<br>ransit delay information element with<br>es in valid combination with bearer class,<br>dband transfer capability ATM traffic<br>riptor and QoS parameters?  |  | М   | 9.2.1, annex A  | [ ]Yes [ ]No   |
| vsis of the End-to-end transit delay<br>nation element in CONNECT<br>sages?   |  | М   | 9.2.2, 10.2.2,<br>annex B   | [ ] Yes [ ] No   |
| sion in SETUP messages of an<br>nded QoS parameter information<br>ent with values in valid combination with<br>er class, broadband transfer capability<br>QoS class?  | R2.2<br>NOT R2.2   | M<br>N/A  |   | [ ]Yes [ ]No<br>[ ]N/A   |
| vsis of the Extended QoS parameter<br>mation element in CONNECT<br>sages?   | R2.2<br>NOT R2.2   | M<br>N/A  |   | [ ] Yes [ ] No<br>[ ]N/A   |
|   | establishment at the destination<br>ace<br>ion in SETUP messages of an End-to-<br>ransit delay information element with<br>s in valid combination with bearer class,<br>lband transfer capability ATM traffic<br>iptor and QoS parameters?<br>sis of the End-to-end transit delay<br>nation element in CONNECT<br>ages?<br>ion in SETUP messages of an<br>ided QoS parameter information<br>ent with values in valid combination with<br>or class, broadband transfer capability<br>QoS class?<br>sis of the Extended QoS parameter<br>nation element in CONNECT | establishment at the destination<br>ace Image: Comparison of the state of the s | establishment at the destination<br>aceMion in SETUP messages of an End-to-<br>ransit delay information element with<br>s in valid combination with bearer class,<br>lband transfer capability ATM traffic<br>iptor and QoS parameters?Mis of the End-to-end transit delay<br>nation element in CONNECT<br>ages?Mion in SETUP messages of an<br>ded QoS parameter information<br>ent with values in valid combination with<br>er class, broadband transfer capability<br>QoS class?MNOT R2.2M<br>N/Asis of the Extended QoS parameter<br>nation element in CONNECTR2.2<br>N/A | establishment at the destination<br>aceM9.2.1, annex Asion in SETUP messages of an End-to-<br>ransit delay information element with<br>s in valid combination with bearer class,<br>lband transfer capability ATM traffic<br>iptor and QoS parameters?M9.2.1, annex Asis of the End-to-end transit delay<br>nation element in CONNECT<br>ages?M9.2.2, 10.2.2,<br>annex Bion in SETUP messages of an<br>ded QoS parameter information<br>ent with values in valid combination with<br>er class, broadband transfer capability<br>QOS class?R2.2<br>NOT R2.2Msis of the Extended QoS parameter<br>hation element in CONNECTR2.2<br>NOT R2.2M10.2.1,<br>annex A |

# Table A.8: Major capabilities

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

# History

| Document history |               |                |                                       |  |  |  |  |
|------------------|---------------|----------------|---------------------------------------|--|--|--|--|
| V1.1.1           | December 2001 | Public Enquiry | PE 20020419: 2001-12-19 to 2002-04-19 |  |  |  |  |
|                  |               |                |                                       |  |  |  |  |
|                  |               |                |                                       |  |  |  |  |
|                  |               |                |                                       |  |  |  |  |
|                  |               |                |                                       |  |  |  |  |

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