

**Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
Connection characteristics;
Peak cell rate modification by the connection owner;
Part 1: Protocol specification**

[ITU-T Recommendation Q.2963.1 (1996), modified]



European Telecommunications Standards Institute

Reference

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Foreword

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

The present document is part 1 of a multi-part standard covering the Digital Subscriber Signalling System No. two (DSS2) protocol specification for the Broadband Integrated Services Digital Network (B-ISDN) peak cell rate modification by the connection owner, as described below:

- Part 1:** "Protocol specification [ITU-T Recommendation Q.2963.1 (1996), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- 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: "TSS&TP specification for the network";
- Part 6: "ATS and partial PIXIT proforma specification for the network".

The present document is the initial standard in a family of standards covering the modification of ATM traffic parameters in B-ISDN connections.

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 text of ITU-T Recommendation Q.2963.1 (1996) was approved by ETSI as an EN with agreed modifications as given below.

NOTE: New or modified text is indicated using sidebars. In addition, underlining and/or strike-out are used to highlight detailed modifications where necessary.

clause 1

Replace clause 1 by:

1 Scope

This first part of EN 301 003 specifies the signalling protocol for peak cell rate modification for the Broadband Integrated Services Digital Network (B-ISDN) at the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [1]) by means of the Digital Subscriber Signalling System No. two (DSS2).

In addition, the present document specifies the protocol requirements at the T_B reference point where the service is provided to the user via a private B-ISDN.

The capability described in the present document enables the connection owner to modify the peak cell rate for call/connections that have already been established.

Peak cell rate modification is applicable to all connection oriented telecommunication services that are based on single point-to-point calls/connections, however, modification is not applicable to emulated N-ISDN services. The peak cell rate modification for point-to-multipoint calls/connections is outside the scope of the present document.

The present document is applicable to equipment, supporting peak cell rate modification, to be attached at either side of a T_B reference point or coincident S_B and T_B reference point when used as an access to the public B-ISDN.

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 service requires the support of the protocol for the basic point-to-point call/bearer connections as defined in the ETS 300 443-1 [4].

clause 2, first paragraph

Replace the first paragraph of clause 2 by:

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case 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.

clause 2

Insert the following references at the end of clause 2:

- [4] 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]".
- [5] EN 301 068-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 1: Protocol specification [ITU-T Recommendations Q.2961.1 (1995), Q.2961.2 to Q.2961.4 (1997), modified]".

Throughout the text of ITU-T Recommendation Q.2963.1

Replace references as shown in the following table.

Reference in ITU-T Recommendation Q.2963.1	Modified reference
ITU-T Recommendation Q.2931 [2]	ITU-T Recommendation Q.2931 as modified by EN 300 443-1 [4]
ITU-T Recommendation Q.2961.1 [3]	ITU-T Recommendation Q.2961.1 as modified by EN 301 068-1 [5]

subclause 5.1

Insert the following paragraph at the end of subclause 5.1:

Modification shall not be requested for emulated N-ISDN services, however, the network shall reject any request.

subclause 8.1.1

Replace the first paragraph of subclause 8.1.1 by:

This message is sent by a requesting entity to modify a single connection.

table 8-1, note 2

Replace note 2 in table 8-1 by the following note:

NOTE 2: For a given direction, the PCR for CLP=0 may be optionally included if this parameter was specified for that direction during call establishment. For both directions, the indication of PCR for CLP=0+1 is mandatory but need not be different from the value indicated during call establishment. However, if a MODIFY REQUEST is received with a Cell Rate parameter not specified, it shall be assumed that the value specified during call establishment still applies.

subclause 8.1.2

Replace the first paragraph of subclause 8.1.2 by:

This message is sent by the responding entity to indicate that the modify request is accepted.

subclause 8.1.3

Replace the first paragraph of subclause 8.1.3 by:

This message is sent by the responding entity to indicate that the modify request is rejected.

subclause 8.1.4

Replace the first paragraph of subclause 8.1.4 by:

This message is sent by the requesting in response to the MODIFY ACKNOWLEDGE message that contains a Broadband report type information element with a Type of Report field coded to "Modification confirmation". It indicates that the network has performed a modification in the addressed user to calling user direction of transmission.

subclause 9.2.1

Replace the complete text of subclause 9.2.1 with the following text:

If the responding entity is a transit entity, on receiving a MODIFY REQUEST message in the active state:

- if the responding transit entity does not support modification of this ATM traffic parameter, the responding transit entity shall reject the modify request with cause #29 "Facility rejected";
- if modification of an ATM traffic parameter is requested that was not specified during call establishment, the responding transit entity shall reject the modify request with cause #29 "Facility rejected" or cause #73 "Unsupported combination of traffic parameters".

If the responding transit entity is able to support the modification request, it shall:

- reserve corresponding resources if increase of ATM traffic parameters is requested;
- change the forward UPC if decrease of forward ATM traffic parameters is requested;
- progress the modification towards the remote user; and
- enter the Modified Received (U/N 14) state.

subclause 9.2.4

Replace the complete text of subclause 9.2.4 with the following text:

If the responding entity is a transit entity, on receiving an indication that the modification has been rejected while in the Modify Requested state, it shall:

- cancel the reservation of resources and reinstate the policing policy that applied prior to the modification request;
- send a MODIFY REJECT message including the Cause information element generated by the addressed entity; and
- enter the Active state.

If the responding entity receives a request for modification of emulated N-ISDN services it shall:

- send a MODIFY REJECT message including a cause information element with cause value #29 "Facility rejected"; and
- enter the Active state.

If the responding entity is a terminating entity, and the request for modification is to be rejected while in the Modify Requested state, it shall:

- send a MODIFY REJECT message including a Cause information element with an appropriate cause value; and
- enter the Active state.

History

Document history		
V1.1.1	December 1997	Public Enquiry PE 9815: 1997-12-12 to 1998-04-10