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STANDARDIZATION SECTOR
OF ITU

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(09/97)

SERIES Q: SWITCHING AND SIGNALLING

**Broadband ISDN – B-ISDN application protocols for
access signalling**

**Digital Subscriber Signalling System No. 2 –
Additional traffic parameters: Signalling
capabilities to support traffic parameters for the
available bit rate (ABR) ATM transfer capability**

ITU-T Recommendation Q.2961.3

(Previously CCITT Recommendation)

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ITU-T RECOMMENDATION Q.2961.3

DIGITAL SUBSCRIBER SIGNALLING SYSTEM No.2 – ADDITIONAL TRAFFIC PARAMETERS: SIGNALLING CAPABILITIES TO SUPPORT TRAFFIC PARAMETERS FOR THE AVAILABLE BIT RATE (ABR) ATM TRANSFER CAPABILITY

Summary

Available Bit Rate (ABR) refers to an ATM transfer capability where the limiting ATM layer transfer characteristics provided by the network may change subsequent to connection establishment. It is expected that a user which adapts its traffic to the changing ATM layer transfer characteristics will experience a low cell loss ratio.

Recommendation Q.2961 covers the support of additional traffic parameters for the B-ISDN at the T_B reference point or coincident S_B and T_B reference point as defined in Recommendation I.413 by means of the DSS 2. This Recommendation defines the DSS 2 protocol procedures, formats and functions needed to support the ABR ATM transfer capability as defined in Recommendation I.371. This Recommendation includes the use of the DSS 2 signalling procedures for the negotiation of Minimum Cell Rate (MCR) during call establishment. ABR precludes use of DSS 2 signalling procedures for the modification of traffic parameters during the active phase of the call.

Source

ITU-T Recommendation Q.2961.3 was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 12th of September 1997.



FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 2 – ADDITIONAL TRAFFIC PARAMETERS: SIGNALLING CAPABILITIES TO SUPPORT TRAFFIC PARAMETERS FOR THE AVAILABLE BIT RATE (ABR) ATM TRANSFER CAPABILITY

(Geneva, 1997)

1 Scope

Recommendation Q.2961 covers the support of additional traffic parameters 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 Recommendation I.413 [1] by means of the Digital Subscriber Signalling System No. 2 (DSS 2). This Recommendation defines the DSS 2 protocol procedures, formats and functions needed to support the identified ATM traffic-related additional capabilities.

This Recommendation is part of the DSS 2 family of Recommendations; it specifies extensions to Recommendation Q.2931, and does not repeat states, information elements, messages and procedures contained therein, but only specifies extensions related to additional traffic parameter indications.

This Recommendation defines the additional traffic parameters required for the support of the Available Bit Rate (ABR) ATM transfer capability as defined in Recommendation I.371 [3].

This Recommendation includes the use of the DSS 2 signalling procedures for the negotiation of traffic parameter Minimum Cell Rate (MCR) during call establishment. ABR precludes use of DSS 2 signalling procedures for the modification of traffic parameters during the active phase of the call.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- [1] ITU-T Recommendation I.413 (1993), *B-ISDN user-network interface*.
- [2] ITU-T Recommendation Q.2931 (1995), *Digital subscriber Signalling System No. 2 – User-Network Interface (UNI) layer 3 specification for basic call/connection control*.
- [3] ITU-T Recommendation I.371 (1996), *Traffic control and congestion control in B-ISDN*.
- [4] ITU-T Recommendation I.150 (1993), *B-ISDN asynchronous transfer mode functional characteristics*.
- [5] ITU-T Recommendation Q.2951.1 (1995) *Stage 3 description for number identification supplementary services using B-ISDN Digital Subscriber Signalling System No. 2 (DSS 2) – Basic call: Direct-Dialling-In (DDI)*.
- [6] ITU-T Recommendation Q.2957.1 (1995), *Stage 3 description for additional information transfer supplementary services using B-ISDN Digital Subscriber Signalling System No. 2 (DSS 2) – Basic call: User-to-User Signalling (UUS)*.



Documents

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