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# ITU-T

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STANDARDIZATION SECTOR  
OF ITU

# Q.2961.5

(03/99)

SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for  
access signalling

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**Digital subscriber signalling system No. 2 –  
Additional traffic parameters: Additional traffic  
parameters for cell delay variation tolerance  
indication**

ITU-T Recommendation Q.2961.5

(Previously CCITT Recommendation)

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SWITCHING AND SIGNALLING

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*For further details, please refer to ITU-T List of Recommendations.*

**ITU-T RECOMMENDATION Q.2961.5****DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 2 – ADDITIONAL TRAFFIC  
PARAMETERS: ADDITIONAL TRAFFIC PARAMETERS FOR CELL DELAY  
VARIATION TOLERANCE INDICATION****Summary**

Recommendation Q.2961.5 belongs to the DSS2 family of ITU-T Recommendations and specifies extensions to Recommendations Q.2931, Q.2961.1, Q.2961.2, Q.2961.3, Q.2961.4, Q.2961.6 and Q.2934 to specify the additional DSS2 traffic-related parameters, formats, protocol procedures and functions needed to support the user-to-network and network-to-user indication of Cell Delay Variation Tolerances at call/connection establishment time, consistently with the traffic management requirements and features defined in Recommendation I.371.

**Source**

ITU-T Recommendation Q.2961.5 was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15th of March 1999.

## FOREWORD

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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.

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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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## Recommendation Q.2961.5

### DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 2 – ADDITIONAL TRAFFIC PARAMETERS: ADDITIONAL TRAFFIC PARAMETERS FOR CELL DELAY VARIATION TOLERANCE INDICATION

(Geneva, 1999)

#### 1 Scope

The Q.2961-series Recommendations 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 (DSS2). This Recommendation defines the DSS2 protocol procedures, formats and functions needed to support the identified ATM traffic-related additional capabilities.

This Recommendation is part of the DSS2 family of ITU-T Recommendations and specifies extensions to Recommendation Q.2931. It 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 signalling capabilities to support the cell delay variation tolerance (CDVT) indications at call/connection establishment time for Peak Cell Rate with  $CLP = 0 + 1$ , for the Sustainable Cell Rate with  $CLP = 0 + 1$ , for the Sustainable Cell Rate with  $CLP = 0$  and for the Resource Management peak cell rate, consistently with the traffic management features and requirements defined in Recommendation I.371 [4].

#### 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 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 F.811 (1996), *Broadband connection-oriented bearer service*.
- [4] ITU-T Recommendation I.371 (1996), *Traffic control and congestion control in B-ISDN*.
- [5] ITU-T Recommendation I.150 (1999), *B-ISDN ATM Functional Characteristics*.
- [6] ITU-T Recommendation I.361 (1999), *B-ISDN ATM layer specification*.
- [7] ITU-T Recommendation Q.2951.x-series (1995), *Stage 3 description for number identification supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS 2) – Basic Call*.
- [8] ITU-T Recommendation Q.2955.1 (1997), *Stage 3 description for community of interest supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS 2) – Closed User Group (CUG)*.