



INTERNATIONAL TELECOMMUNICATION UNION

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TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

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(03/2000)

SERIES E: OVERALL NETWORK OPERATION,
TELEPHONE SERVICE, SERVICE OPERATION AND
HUMAN FACTORS

Quality of service, network management and traffic
engineering – Traffic engineering – ISDN traffic
engineering

Cell level measurement requirements for the B-ISDN

ITU-T Recommendation E.745

(Formerly CCITT Recommendation)

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OVERALL NETWORK OPERATION, TELEPHONE SERVICE, SERVICE OPERATION AND HUMAN FACTORS

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CELL LEVEL MEASUREMENT REQUIREMENTS FOR THE B-ISDN

Summary

This Recommendation provides the requirements to measurements needed at the cell level for an ATM (Asynchronous Transfer Mode)-based B-ISDN (Broadband Integrated Services Digital Network) network. Measurements may be both for real time and for record. The first release of this Recommendation focuses on the latter. This Recommendation is not restricted to point-to-point connections, but covers point-to-multipoint connections as well.

Source

ITU-T Recommendation E.745 was prepared by ITU-T Study Group 2 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on 13 March 2000.

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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CELL LEVEL MEASUREMENT REQUIREMENTS FOR THE B-ISDN

(Geneva, 2000)

1 Scope

This Recommendation provides the requirements to measurements needed at the cell level for an ATM (Asynchronous Transfer Mode)-based B-ISDN (Broadband Integrated Services Digital Network) network. Measurements may be both for real time and for record. The first release of this Recommendation focuses on the latter. This Recommendation is not restricted to point-to-point connections, but covers point-to-multipoint connections as well.

2 References

This Recommendation is based on and/or supplements the following Recommendations:

- ITU-T Recommendation E.492 (1996), *Traffic reference period*.
- CCITT Recommendation E.502 (1992), *Traffic measurement requirements for digital telecommunication exchanges*.
- CCITT Recommendation E.505 (1992), *Measurements of the performance of common channel signalling network*.
- ITU-T Recommendation E.600 (1993), *Terms and definitions of traffic engineering*.
- ITU-T Recommendation E.716 (1996), *User demand modelling in Broadband-ISDN*.
- ITU-T Recommendation E.726 (2000), *Network grade of service parameters and target values for B-ISDN*.
- ITU-T Recommendation E.736 (2000), *Methods for cell level traffic control in B-ISDN*.
- ITU-T Recommendation E.737 (1997), *Dimensioning methods for B-ISDN*.
- ITU-T Recommendation E.743 (1995), *Traffic measurements for SS No. 7 dimensioning and planning*.
- ITU-T Recommendation E.800 (1994), *Terms and definitions related to quality of service and network performance including dependability*.
- ITU-T Recommendation G.826 (1999), *Error performance parameters and objectives for international constant bit rate digital paths at or above the primary rate*.
- ITU-T Recommendation I.150 (1999), *B-ISDN asynchronous transfer mode functional characteristics*.
- CCITT Recommendation I.321 (1991), *B-ISDN protocol reference model and its application*.
- ITU-T Recommendation I.350 (1993), *General aspects of quality of service and network performance in digital networks, including ISDNs*.
- ITU-T Recommendation I.353 (1996), *Reference events for defining ISDN and B-ISDN performance parameters*.
- ITU-T Recommendation I.356 (2000), *B-ISDN ATM layer cell transfer performance*.