INTERNATIONAL TELECOMMUNICATION UNION

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TELECOMMUNICATION
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OF ITU

SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for the network signalling

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Extensions to the Signalling System No. 7 B-ISDN User Part – Signalling capabilities to support the indication of the Statistical Bit Rate configuration 2 (SBR 2) and 3 (SBR 3) ATM transfer capabilities

ITU-T Recommendation Q.2723.6
Superseded by a more recent version

(Previously CCITT Recommendation)

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ITU-T RECOMMENDATION Q.2723.6

EXTENSIONS TO THE SIGNALLING SYSTEM No. 7 B-ISDN USER PART – SIGNALLING CAPABILITIES TO SUPPORT THE INDICATION OF THE STATISTICAL BIT RATE CONFIGURATION 2 (SBR 2) AND 3 (SBR 3) ATM TRANSFER CAPABILITIES

Summary

This Recommendation belongs to the set of Q.2723 series of ITU-T Recommendations that cover the support of additional traffic parameters through the Broadband Integrated Services digital network User Part (B-ISUP).

This Recommendation describes the B-ISUP support of the SBR 2 and SBR 3 ATM transfer capabilities defined in Recommendation I.371 [1] and Annex A/Q.2961.6 [2]. It defines additional code points and procedures beyond the ones already specified by Recommendations Q.2763, Q.2723.1 and Q.2723.2.

Source

ITU-T Recommendation Q.2723.6 was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15th of May 1998.

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.

NOTE

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

INTELLECTUAL PROPERTY RIGHTS

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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.

CONTENTS

EXTENSIONS TO THE SIGNALLING SYSTEM No. 7 B-ISDN USER PART – SIGNALLING CAPABILITIES TO SUPPORT THE INDICATION OF THE STATISTICAL BIT RATE CONFIGURATION 2 (SBR 2) AND 3 (SBR 3) ATM TRANSFER CAPABILITIES

(Geneva, 1998)

1 Scope

This Recommendation specifies extensions to the Broadband ISDN User Part protocol to support the indication of the Statistical Bit Rate Configuration 2 and 3 ATM transfer capabilities (SBR 2, SBR 3) as defined in Recommendation I.371 [1]. It defines additional code points and procedures beyond the ones already specified by Recommendations Q.2763 [3], Q.2723.1 [6] and Q.2723.2 [7].

It defines:

– parameter coding needed;

– primitive parameters needed to model the new capabilities according to the specification model for the B-ISDN user part defined in Recommendation Q.2764 [4]; and

– enhancements to the Application Process procedures.

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.371 (1996), *Traffic control and congestion control in B-ISDN.*

[2] ITU-T Recommendation Q.2961.6 (1998), *Digital subscriber signalling System No. 2 – Additional traffic parameters: Additional signalling procedures for the support of the SBR 2 and SBR 3 ATM transfer capabilities.*

[3] ITU-T Recommendation Q.2763 (1995), *Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes.*

[4] ITU-T Recommendation Q.2764 (1995), *Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures.*

[5] ITU-T Recommendation Q.2650 (1995), *Interworking between Signalling System No. 7 broadband ISDN User Part (B-ISUP) and digital subscriber signalling system No. 2 (DSS 2).*

[6] ITU-T Recommendation Q.2723.1 (1996), *B-ISDN user part – Support of additional traffic parameters for Sustainable Cell Rate and Quality of Service.*

[7] ITU-T Recommendation Q.2723.2 (1997), *Extensions to the B-ISDN User Part – Support of ATM transfer capability in the broadband bearer capability parameter.*

[8] ITU-T Recommendation Q.2961.2 (1997), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Support of ATM transfer capability in the broadband bearer capability information.*

3 Abbreviations

This Recommendation uses the following abbreviations:

ATC ATM Transfer Capability

ATM Asynchronous Transfer Mode

SBR Statistical Bit Rate

SBR 2 SBR configuration 2 ATM transfer capability

SBR 3 SBR configuration 3 ATM transfer capability

4 B-ISDN user part messages and parameters

4.1 Parameters and parameter subfields

The following parameter is affected in B-ISUP.

4.1.1 Broadband bearer capability

The additional codepoints for the SBR 2 and SBR 3 ATM transfer capabilities are specified in Recommendation Q.2961.6 [2].

5 Call Control, application process functions

The extended Broadband bearer capability parameter is used to route the connection as defined in Recommendation Q.2764 [4], extended by the procedures of Recommendations Q.2723.1 [6] and Q.2723.2 [7].

6 Application service elements and primitives

The application service elements and primitives are not affected by this Recommendation.

7 Interworking

7.1 Interworking with nodes which do not support the procedures described in this Recommendation

As the indication of the SBR 2 and SBR 3 ATC in the Broadband bearer capability parameter is routing relevant, it shall not be routed to an exchange not supporting that service, unless there is an error in routing. If such an error occurs, the following applies:

Nodes not supporting this feature will treat the SBR 2 and SBR 3 specific parameter values as unrecognized signalling information. The instruction indicators for the Broadband bearer capability parameter shall be set so as to release the connection.

NOTE – In order to ensure the correct behaviour, the instruction indicators should be set as shown in Appendix II/Q.2764 [4].

7.2 Interworking with ISUP

The SBR 2 and SBR 3 ATCs are not applicable to the emulation of 64 kbit/s services. At the B-ISUP/ISUP interworking point the connection shall therefore be released with cause #63, "Service or option not available, unspecified".

7.3 Interworking with DSS 2

There are no new mapping tables required, in addition to those mappings already shown in Recommendations Q.2650 [5], Q.2723.1 [6] and Q.2723.2 [7].

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