ITU

INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.2722.1
Amendment 1
(06/2000)

SERIES Q: SWITCHING AND SIGNALLING

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

B-ISDN User Part – Network node interface specification for point-to-multipoint call/connection control

Amendment 1

ITU-T Recommendation Q.2722.1 – Amendment 1

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation Q.2722.1

**B-ISDN User Part – Network node interface specification
for point-to-multipoint call/connection control**

AMENDMENT 1

Summary

ITU-T Q.2722.1 specifies the extensions to the Broadband ISDN User Part (B-ISUP) to support point-to-multipoint call/connection control. This Amendment 1 to ITU-T Q.2722.1 has been prepared to enable the use of the modified B-ISUP assignment procedures together with the point-to-multipoint call/connection control. This amendment includes the additional procedures required to support the modified B-ISUP assignment procedures. In addition it contains corrections of editorial errors identified in ITU-T Q.2722.1 since its first publication in 1996.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSC Resolution 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

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, 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.

© ITU 2001

Introduction

This Amendment 1 to ITU-T Q.2722.1 has been prepared to enable the use of the modified B-ISUP assignment procedures together with the point-to-multipoint call/connection control.

This amendment includes the additional procedures required to support the modified B-ISUP assignment procedures. In addition it contains corrections of editorial errors identified in ITU-T Q.2722.1 since its first publication in 1996.

ITU-T Recommendation Q.2722.1

**B-ISDN User Part − Network node interface specification
for point-to-multipoint call/connection control**

AMENDMENT 1

1)   Replacements and additions

a)   Clause 1.2

Replace 1.2 with the following:

1.2   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.

–   ITU-T I.610 (1995), *B-ISDN operation and maintenance principles and functions*.

–   ITU-T Q.2650 (1999), *Interworking between Signalling System No. 7 broadband ISDN user part (B-ISUP) and Digital Subscriber Signalling System No. 2 (DSS2)*.

–   ITU-T Q.2721.1 (1996), *B-ISDN user part − Overview of the B-ISDN network node interface signalling capability set 2, step 1*.

   NOTE − The content of this Recommendation was integrated into the "core" set of B-ISDN user part Recommendations (Q.2761 through Q.2764).

–   ITU-T Q.2761 (1999), *Functional description of the B-ISDN user part (B-ISUP) of Signalling System No. 7*.

–   ITU-T Q.2762 (1999), *General functions of messages and signals of the B-ISDN user part (B-ISUP) of Signalling System No. 7*.

–   ITU-T Q.2763 (1999), *Signalling System No. 7 B-ISDN user part (B-ISUP) − Formats and codes*.

–   ITU-T Q.2764 (1999), *Signalling System No. 7 B-ISDN user part (B-ISUP) − Basic call procedures*.

–   ITU-T Q.2931 (1995), *Digital Subscriber Signalling System No. 2 − User-Network Interface (UNI) layer 3 specification for basic call/connection control*.

–   ITU-T Q.2971 (1995), *Digital Subscriber Signalling System No. 2 − User-network interface layer 3 specification for point-to-multipoint call/connection control*.

b) Clause 2.2.1.1.1, item e)

Replace item e) with the following:

e) *Set_Up request primitive – issued by the non-assigning exchange*

Option 1

With regard to the issuing of the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the connection element identifier shall not be included in the Set_Up request primitive.

Option 2

With regard to the issuing of the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the Exclusive connection element identifier parameter shall be included in the Set_Up request primitive instead of the Connection element identifier parameter.

c) Clause 2.2.1.1.2.1

Replace 2.2.1.1.2.1 with the following:

2.2.1.1.2.1 Incoming side of the exchange

a) *Assigning exchange*

Option 1

After having received a Set_Up indication primitive, an incoming connection link object instance shall be created. An assigning exchange shall perform the assignment procedure for VPCI/VCI and bandwidth as described in 2.1.2.2 b)/Q.2764. If this is successful the Incoming_Resources_ Accepted request primitive shall be issued immediately. The Incoming_Resources_Accepted request primitive shall include the mandatory parameters listed in Table 2-4, including the origination connection link identifier and connection element identifier parameters.

Option 2

After having received a Set_Up indication primitive, an incoming connection link object instance shall be created. An assigning exchange shall perform the assignment procedure as described in 2.1.2.2 b)/Q.2764. If this is successful the Incoming_Resources_Accepted request primitive shall be issued immediately. The Incoming_Resources_Accepted request primitive shall include the mandatory parameters listed in Table 2-4, including the origination connection link identifier and connection element identifier parameters.

b) *Non-assigning exchange*

Option 1

After having received a Set_Up Indication primitive an incoming connection link object instance shall be created. A non-assigning exchange shall issue the Incoming_Resources_Accepted request primitive immediately. The Incoming_Resources_Accepted request primitive shall include the mandatory parameters listed in Table 2-4, without the connection element identifier parameter but containing the assigned origination connection link identifier parameter.

Option 2

After having received a Set_Up Indication primitive an incoming connection link object instance shall be created. A non-assigning exchange shall perform the assignment procedure as described in 2.1.2.2 a)/Q.2764. If this is successful the Incoming_Resources_Accepted request primitive shall be issued immediately. The Incoming_Resources_Accepted request primitive shall include the mandatory parameters listed in Table 2-4, without the connection element identifier parameter but containing the assigned origination connection link identifier parameter.

d)   Clause 2.2.1.1.2.2, item c)

Replace item c) with the following:

c)   *Set_Up request primitive – issued by the non-assigning exchange*

   Option 1

   With regard to the issuing of the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the connection element identifier shall not be included in the Set_Up request primitive.

   Option 2

   With regard to the issuing of the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the Exclusive connection element identifier parameter shall be included in the Set_Up request primitive instead of the Connection element identifier parameter.

e)   Clause 2.2.1.2.1, item e)

Replace item e) with the following:

e)   *Set_Up request primitive – issued by the non-assigning exchange*

   Option 1

   With regard to issuing the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the connection element identifier shall not be included in the Set_Up request primitive.

   Option 2

   With regard to the issuing of the Set_Up request primitive by the non-assigning exchange, the same procedures as for the assigning exchange are applicable, with the exception that the Exclusive connection element identifier parameter shall be included in the Set_Up request primitive instead of the Connection element identifier parameter.

f)   Additions to Table 2-2

Add the following to Table 2-2:

Set_Up request/indication	
Parameter	**Mandatory/Optional**
✶	✶
Exclusive connection element identifier	O
✶	✶

2) **Error corrections**

a) *Correct 2.4.5.1, item d) as follows*:

d) *Collision of release primitives*

    i) Outgoing side of an exchange

        After sending the release request primitive with the destination connection link identifier parameter, a release indication primitive may be received. In this case, the exchange shall return a release response primitive towards the B-ISUP AEI from which the concerned release indication primitive was received. The release response primitive shall be issued when the transmission path is disconnected.

    ii) Incoming side of an exchange

        After sending a release request primitive a release indication primitive with a destination connection link identifier parameter may be received. In this case, the exchange shall continue as described in 2.4.5.1 b).

SERIES OF ITU-T RECOMMENDATIONS

Series A   Organization of the work of ITU-T

Series B   Means of expression: definitions, symbols, classification

Series C   General telecommunication statistics

Series D   General tariff principles

Series E   Overall network operation, telephone service, service operation and human factors

Series F   Non-telephone telecommunication services

Series G   Transmission systems and media, digital systems and networks

Series H   Audiovisual and multimedia systems

Series I   Integrated services digital network

Series J   Transmission of television, sound programme and other multimedia signals

Series K   Protection against interference

Series L   Construction, installation and protection of cables and other elements of outside plant

Series M   TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits

Series N   Maintenance: international sound programme and television transmission circuits

Series O   Specifications of measuring equipment

Series P   Telephone transmission quality, telephone installations, local line networks

Series Q   **Switching and signalling**

Series R   Telegraph transmission

Series S   Telegraph services terminal equipment

Series T   Terminals for telematic services

Series U   Telegraph switching

Series V   Data communication over the telephone network

Series X   Data networks and open system communications

Series Y   Global information infrastructure and Internet protocol aspects

Series Z   Languages and general software aspects for telecommunication systems