



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

F.732

(10/96)

**SERIES F: NON-TELEPHONE TELECOMMUNICATION
SERVICES**

Audiovisual services

Multimedia conference services in the B-ISDN

ITU-T Recommendation F.732

(Previously CCITT Recommendation)

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

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (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 (Helsinki, March 1-12, 1993).

ITU-T Recommendation F.732 was prepared by ITU-T Study Group 1 (1993-1996) and was approved by the WTSC (Geneva, October 9-18, 1996).

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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SUMMARY

This Recommendation encompasses a broad range of related services, including the videoconference service, and also the audiographic conference service, the videophone conference service and CDH (Collaborative Document Handling). It is part of a general framework for Recommendations on multimedia services.

This Recommendation refers to Recommendation F.702 (Multimedia conference services) and contains only those parts that require complements or choices between options in order to apply it specifically to B-ISDN and to take full advantage of its enhanced capabilities.

Because in the coming years the broadband conference rooms will have to interwork with the existing narrow-band systems, a large part of this Recommendation is devoted to the various possible configurations for interworking (see clause 8). Thus, when B-ISDN is interconnected with 64 kbit/s-based ISDN, it will also have to provide the services which are currently provided by this network, and insure interworking with existing narrow-band terminals.

Recommendation F.732**MULTIMEDIA CONFERENCE SERVICES IN THE B-ISDN***(Geneva, 1996)***1 Scope**

This Recommendation describes the multimedia conference services supported by a B-ISDN. It relies on Recommendation F.702 for the main body of the description, and only gives the specific complements relevant to the B-ISDN that derive from its capabilities and its limitations. Thus, when reading this Recommendation, it is necessary to refer back to Recommendation F.702. The numbers of the clauses are those of F.702, and thus they do not form a continuous sequence because only a few clauses need a specific complement for the B-ISDN. In addition, there is a new clause 9 on the attributes for the various profiles. Because interworking with the N-ISDN is a major requirement and will probably be a very frequent way of setting up conferences in the next few years, this is described in great detail in clause 8.

2 Definition

See Recommendation F.702.

3 Terminology

See Recommendation F.702.

4 Description**4.1 General description**

See Recommendation F.702.

4.2 Functional model

See Recommendation F.702.

4.3 Configuration**4.3.1 Configuration at the network access**

The following figures describe the possible basic scenarios corresponding to a multimedia conference offered at the network access.

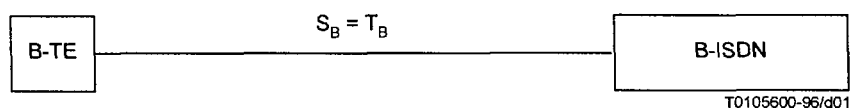
4.3.1.1 Access type 1

Figure 1/F.732 – Configuration

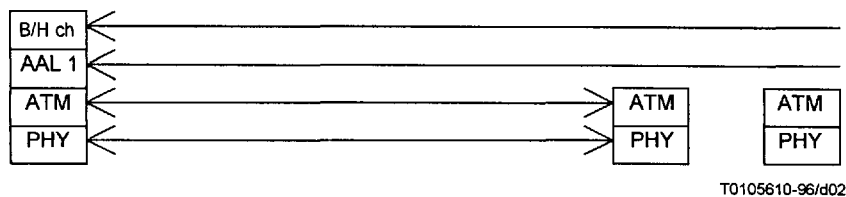


Figure 2/F.732 – U-plane

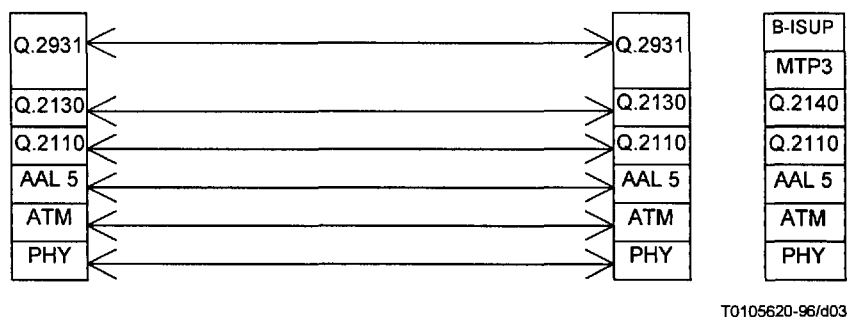


Figure 3/F.732 – C-Plane

4.3.1.2 Access type 2

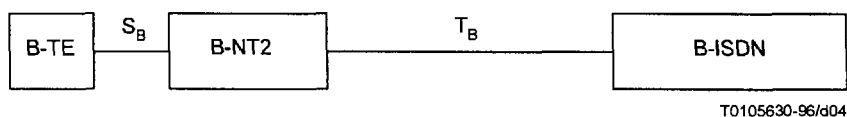


Figure 4/F.732 – Configuration

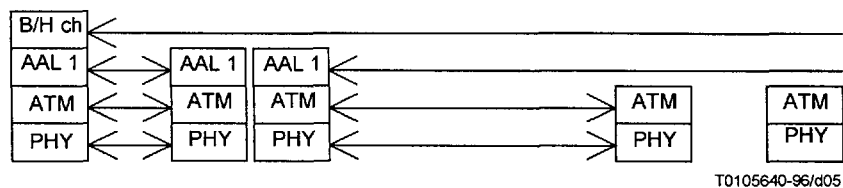
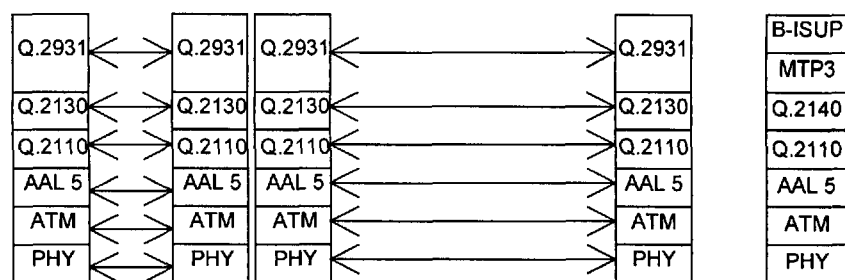


Figure 5/F.732 – U-plane



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Figure 6/F.732 – C-Plane

4.4 Roles of the participants

See Recommendation F.702.

4.5 Terminal aspects

Two types of terminals may be used on the B-ISDN: those that are specifically designed for the B-ISDN and those that are adapted from the narrow-band terminals. When video is present (videoconference, videophone and some CDH terminals), the first kind of terminals conform to Recommendation H.310, while the second kind conforms to Recommendation H.321.

Audio

The normal audio mode for conferencing services is wideband audio conforming to Recommendation G.722. A G.711 codec should also be present for interworking purposes. G.728 coding may also be used in interworking or fall-back situations, or temporarily to leave a larger bandwidth to the video or to the data subchannels, e.g. while showing an object or transmitting a document.

The use of higher quality audio codecs is for further study.

Video (when applicable)

Video codecs shall conform to Recommendation H.262 or H.261; H.261 codecs shall always be present for interworking purposes.

4.6 Applications

See Recommendation F.702.

4.7 Supplementary services

For further study.

5 Static aspects

5.1 Service level

5.1.1 General aspects of the service

See Recommendation F.702.

5.1.2 Quality of service

See Recommendation F.702.

5.1.3 Security aspects

See Recommendation F.702.

5.1.4 General charging principles

See Recommendation F.702.

5.2 Communication task level**5.2.1 Communication tasks used for the service**

See Recommendation F.702.

5.2.2 Quality of service

See Recommendation F.702.

5.3 Media component level**5.3.1 Media components used for the service**

See Recommendation F.702.

5.3.2 Quality of service

See Recommendation F.702.

6 Dynamic aspects**6.1 Activation phase**

See Recommendation F.702.

6.2 Communication phase**6.2.1 Call set-up**

See Recommendation F.702.

6.2.2 Addition of another party during the call

See Recommendation F.702.

6.2.3 Conference splitting

See Recommendation F.702.

6.2.4 Change of communication mode

See Recommendation F.702.

6.2.5 Call prolongation in the case of reservation

See Recommendation F.702.

6.2.6 Call disconnection

See Recommendation F.702.

6.2.7 Conference management procedures

The procedures for multipoint broadband conference services are those of the T.120-Series of Recommendations. Audio and video control use the T.126 procedure. Other media components should be transmitted on the common data subchannel supporting the T.120-Series protocol and are controlled through that channel.