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CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

F.720

(08/92)

**TELEMATIC, DATA TRANSMISSION,
ISDN BROADBAND, UPT AND
TELECONFERENCE SERVICES:
OPERATIONS AND QUALITY OF SERVICE**

VIDEOTELEPHONY SERVICES – GENERAL



Recommendation F.720

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT 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 Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation F.720 was prepared by Study Group I and was approved under the Resolution No. 2 procedure on the 4th of August 1992.

CCITT NOTE

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

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Recommendation F.720**VIDEOTELEPHONY SERVICES – GENERAL***(1992)***The CCITT,***considering*

(a) that videotelephony services have been introduced in pilot form in various network environments in a number of countries;

(b) that videotelephony services are liable to be demanded by users around the whole world;

(c) that users will expect an acceptable minimum Quality of Service;

(d) that users will expect an ease of use comparable to ordinary telephony;

(e) that users will expect a high level of interoperability with other audiovisual services and with telephony,

adopts

the subsequent Recommendation dealing with the general description for videotelephony services.

The relevant attributes and values are incorporated as part of each dedicated service description.

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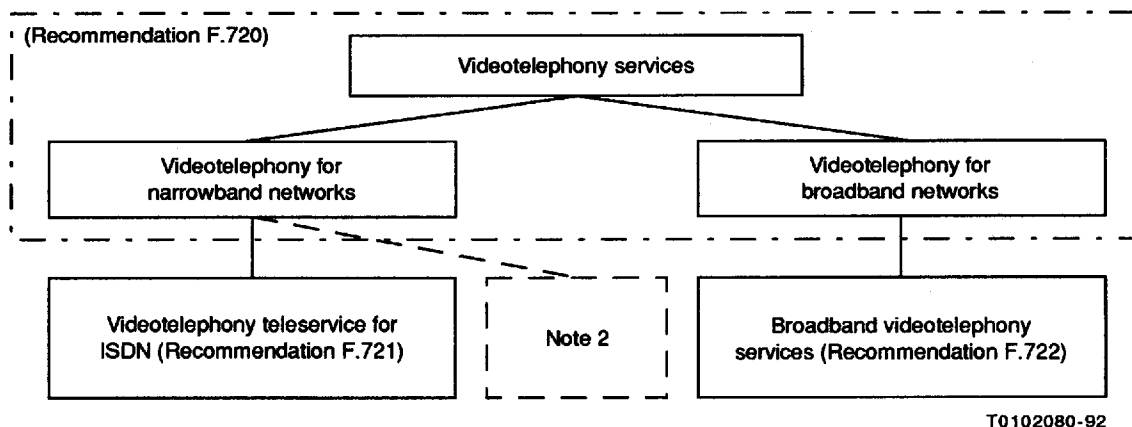
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1 Introduction

The purpose of this Recommendation is to define and describe the general features and attributes of the videotelephony service regardless of the network environment where the service might be provided. The videotelephony service is classified in the following two main categories:

- videotelephony service for narrow-band networks;
- videotelephony service for broadband networks.

The intention is to assign a dedicated Recommendation for each type of videotelephony service in specific networks. The dedicated Recommendation is due to contain a description in detail of the service concerned with all relevant characteristics and attributes. Recommendation F.721 covers the basic videotelephony service in the Integrated services digital network (ISDN) due to this classification. Dedicated service Recommendations for higher quality videotelephony services are for further study. The higher quality videotelephony service will not necessarily employ any fixed information transfer rate as variable bit rate coding may be used. The classification of videotelephony services is depicted in Figure 1/F.720.



Note 1 – In broadband ISDN the service offerings may also comprise videotelephony services using low bit rates.

Note 2 – In the future, videotelephony services may be provided also other networks requiring new dedicated service Recommendations.

FIGURE 1/F.720
Classification of videotelephony services

2 Definition

Videotelephony service is an audiovisual conversational teleservice providing bidirectional symmetric real-time transfer of voice and moving colour pictures between two locations (person-to-person) via the networks involved. The minimum requirement is that under normal conditions the picture information transmitted is sufficient for the adequate representation of fluid movements of a person displayed in head and shoulders view (see Note).

Note – The smoothness of the movements in the reproduced picture is essentially dependent on the amount of motion with respect to the transfer rate of transmitted picture information. The above requirements are supposed to be met under such conditions where the amount of motion is limited or the throughput is high enough not to impair the received picture. Degradation is likely to appear as increased blurring and jerkiness in the reproduced picture. Besides this, other artifacts may occur.

3 Description

3.1 General description

The plain videotelephony service includes only the basic user requirements, namely speech and motion picture with essential controls and indications; the service can be enhanced with options providing auxiliary facilities such as transmission of high resolution still images of documents, photographs, drawings, charts, objects, etc. (see Note).

Note – Speech supported only by still picture transmission and/or telewriting is not considered as a part of the videotelephony service. This type of communication may either be considered as a separate audiovisual service or as a form of audiographic conference service in a point-to-point configuration.