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INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

SERVICE CAPABILITIES

IN-CALL MODIFICATION (IM)

ITU-T Recommendation I.258.2

(Previously "CCITT Recommendation")

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 I.258.2 was prepared by ITU-T Study Group 1 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 21st February 1995.

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

The In-call Modification (IM) supplementary service enables a user to change within an established (i.e. active) call from one type of call characterized by one set of bearer capability, low layer and/or high layer capabilities to another type of call with another set without changing the end-to-end connection from a user/network-access point of view.

Further in-call modification(s) back to the original or to another call type shall be possible.

As a network option, the user can choose, when invoking the supplementary service, that the network automatically modifies the call back to the original call type at the end of the modified part of the connection.

Recommendation I.258.2**IN-CALL MODIFICATION (IM)***(Geneva, 1994)***1 Definition**

The **In-call Modification (IM) supplementary service** enables a user to change within an established (i.e. active) call from one type of call characterized by one set of bearer capability, low layer and/or high layer capabilities to another type of call with another set without changing the end-to-end connection from a user/network-access point of view.

Further in-call modification(s) back to the original or to another call type shall be possible.

As a network option, the user can choose, when invoking the supplementary service, that the network automatically modifies the call back to the original call type at the end of the modified part of the connection. This option is called **Double IM**.

When this option is not supported by the network or is not requested by the user, the invocation of IM is called **Single IM**.

2 Description**2.1 Possible configurations**

Several configurations may occur, where IM will be used:

2.1.1 Configuration 1

At both ends of the connection, there exists at least two different single capability terminals.

2.1.2 Configuration 2 (mixed configuration)

At one end, there exists multiple capability terminal equipment and at the other end at least two single capability terminals.

In this mixed configuration, two cases can be distinguished:

- the invocation of IM may occur at the side with the two or more terminals, so that the existing call can be continued from a second terminal;
- the invocation of IM may also occur at the side with the multiple capability terminal equipment resulting in a transfer of the existing call to a second terminal at the other end of the connection.

2.1.3 Configuration 3

At both ends, there exists multiple capability terminals.

2.2 General description

IM shall be provided on a per call basis. It can be invoked by either the calling or the called party.

IM shall be possible also between the following bearer services:

- speech;
- 64 kbit/s unrestricted;
- 3.1 kHz audio;
- $n \times 64$ kbit/s unrestricted.

Other bearer services are for further study.