TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

1.254.5

(05/97)

SERIES I: INTEGRATED SERVICES DIGITAL NETWORK

Service capabilities - Supplementary services in ISDN

Multiparty supplementary services: Meet-me conference

ITU-T Recommendation I.254.5

(Previously CCITT Recommendation)

ITU-T I-SERIES RECOMMENDATIONS

INTEGRATED SERVICES DIGITAL NETWORK

GENERAL STRUCTURE	I.100-I.199
Terminology	I.110–I.119
Description of ISDNs	I.120-I.129
General modelling methods	I.130-I.139
Telecommunication network and service attributes	I.140-I.149
General description of asynchronous transfer mode	I.150-I.199
SERVICE CAPABILITIES	I.200-I.299
Scope	I.200-I.209
General aspects of services in ISDN	I.210-I.219
Common aspects of services in the ISDN	I.220-I.229
Bearer services supported by an ISDN	I.230-I.239
Teleservices supported by an ISDN	I.240-I.249
Supplementary services in ISDN	I.250-I.299
OVERALL NETWORK ASPECTS AND FUNCTIONS	I.300-I.399
Network functional principles	I.310-I.319
Reference models	I.320-I.329
Numbering, addressing and routing	I.330-I.339
Connection types	I.340-I.349
Performance objectives	I.350-I.359
Protocol layer requirements	I.360-I.369
General network requirements and functions	I.370-I.399
ISDN USER-NETWORK INTERFACES	I.400-I.499
Application of I-series Recommendations to ISDN user-network interfaces	I.420-I.429
Layer 1 Recommendations	I.430-I.439
Layer 2 Recommendations	I.440–I.449
Layer 3 Recommendations	I.450–I.459
Multiplexing, rate adaption and support of existing interfaces	I.460-I.469
Aspects of ISDN affecting terminal requirements	I.470–I.499
INTERNETWORK INTERFACES	I.500-I.599
MAINTENANCE PRINCIPLES	I.600-I.699
B-ISDN EQUIPMENT ASPECTS	I.700-I.799
ATM equipment	I.730-I.749
Management of ATM equipment	I.750–I.799

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

ITU-T RECOMMENDATION 1.254.5

MULTIPARTY SUPPLEMENTARY SERVICES: MEET-ME CONFERENCE

Summary

This supplementary service provides a user with the ability to arrange for a call between more than two participants with all participants accessing a conference bridge. The meet-me conference supplementary service is activated for a specified period booked in advance by the served user.

In due time, each participant in the conference has to dial a special number which has been attached to the booked conference, in order to access the conference bridge.

All indications are sent in-band and/or out-band.

Source

ITU-T Recommendation I.254.5 was prepared by ITU-T Study Group 2 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 26th of May 1997.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the 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.

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

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The 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, the ITU had/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 1997

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

1	Defini	tion
2	Descri	ption
	2.1	General description
	2.2	Specific terminology
	2.3	Applicability to telecommunication services
3	Procee	lures
	3.1	Provision/withdrawal
	3.2	Normal procedures
	3.3	Exceptional procedures
4	Netwo	ork capabilities for charging
5	Interw	orking requirements
	5.1	Interworking with non-ISDN networks
	5.2	Interworking with private ISDNs
6	Interac	ction with other supplementary services
Ü	6.1	Advice of charge services
	6.2	Call hold (HOLD)
	6.3	Call transfer
	6.4	Call Waiting (CW)
	6.5	Closed User Group (CUG)
	6.6	Completion of calls services
	6.7	Conference services
	6.8	Diversion services.
	6.9	Direct-Dialling-In (DDI)
	6.10	In-call Modification (IM)
	6.11	ISDN Freephone Service (IFS)
	6.12	Line Hunting (LH)
	6.13	Malicious Call Identification (MCID)
	6.14	Multi-Level Precedence and Preemption (MLPP)
	6.15	Multiple Subscriber Number (MSN)
	6.16	Name identification services
	6.17	Number identification services
	6.18	Outgoing Call Barring (OCB)
	6.19	Reverse Charging (REV)
	6.20	Sub-addressing (SUB)
	6.21	Support of Private Numbering Plans (SPNP)
	6.22	Terminal Portability (TP)
	6.23	User-to-User signalling (UUS)

MULTIPARTY SUPPLEMENTARY SERVICES: MEET-ME CONFERENCE

(Geneva, 1997)

1 Definition

This supplementary service provides a user with the ability to arrange for a call between more than two participants with all participants accessing a conference bridge.

2 Description

2.1 General description

The Meet-Me Conference (MMC) supplementary service is activated for a specified period booked in advance by the served user.

In due time, each participant in the conference has to dial a special number which has been attached to the booked conference, in order to access the conference bridge.

All indications are sent in-band and/or out-band.

2.2 Specific terminology

In the description that follows, the **served user** is the user that booked the conference.

The other users are called "conferees".

A **participant** is either the served user or a conferee.

A **special number** is a number allocated for accessing the conference.

2.3 Applicability to telecommunication services

This supplementary service is applicable to all circuit-mode services.

3 Procedures

3.1 Provision/withdrawal

Provision may be general without any prior arrangement with the administration.

Withdrawal may be general for administrative reasons.

3.2 Normal procedures

3.2.1 Activation/deactivation/registration

3.2.1.1 Activation

The meet-me conference supplementary service is activated for a specified period booked in advance by the served user.

The time between booking and activation of the conference may be limited.

There may be a predefined time period after booking before activation is allowed.

3.2.1.2 Deactivation

Release of the conference

At the end of the scheduled time of the conference, the conference is released, every participant still connected being automatically released.

Before the release operation, specific in-band and/or out-band information may be sent to the participants in order to inform them of the approaching end of the conference. When and how often this information is given are service provider options.

3.2.1.3 Registration

This service requires a booking of a calling period by the served user.

This booking can be via an operator or can be automatic (e.g. by using a Videotex communication with a reservation centre). The booking procedure is beyond the scope of this Recommendation.

The following information needs to be provided by the served user and to be registered in the network:

- starting date and time of the conference;
- duration or end date and time;
- maximum number of simultaneous participants.

The served user may request to modify this information or to cancel the request for the conference prior to the start of the conference.

If the registration is accepted, a special number and a conference resource shall be temporarily allocated to the conference.

The special number is indicated to the served user who has to communicate this number to the conferees.

The maximum number of simultaneous participants in the conference may be limited (e.g. to ten).

3.2.2 Erasure

Erasure is beyond the scope of this Recommendation.

3.2.3 Invocation and operation

Access to the conference

To access the conference bridge, each participant shall dial the special number associated with the booked conference. In addition, a caller may need to specify a conference reference number and/or a security password.

If a call is received less than T minutes (e.g. T=2) before the starting time, the call shall be connected and information shall be sent in-band and/or out-band to the calling user. If this information is sent in-band, the calling user shall get an indication that the conference will start soon. If this information is sent out-band, the calling user shall be notified of the starting time of the conference. The value of T is a service provider option. Before the starting time of the conference no communication shall be possible between the participants. When the conference subsequently begins, the connected participants shall be informed in-band and/or out-band that the conference has begun.

The service is invoked by the first participant dialling the special number either:

- a) after the starting time but before the end time; or,
- b) within *T* minutes before the starting time.

After the starting time of the conference, an indication shall be given to the first participant until another participant joins the conference.

The access to a conference is allowed for the duration of the conference, if the maximum number of simultaneous participants has not been reached.

When one or more participants are connected to the conference, in-band and/or out-band indication shall be sent to the other participants each time a new participant is about to be connected to the conference. When the new participant has been added to the conference, then the existing participants can communicate with the new participant.

As a service provider option, the identification (e.g. calling name, calling number), if available, of new participants may be provided to the already connected ones.

Clearing connections to the conference

At any time, each participant can leave the conference (normal release of a call).

3.2.4 Interrogation

Not applicable.

3.3 Exceptional procedures

3.3.1 Activation/deactivation/registration

Not applicable.

3.3.2 Erasure

Not applicable.

3.3.3 Invocation and operation

When the maximum number of simultaneous participants has been reached, every new call using the special number shall be rejected as a call to a busy destination. If a participant subsequently leaves the conference, then normal procedures shall apply.

Administration requirements

At any time, an operator has the possibility to be connected to the conference in progress or to each individual participant by means of a specific procedure. This procedure is beyond the scope of this Recommendation.

This will allow the operator, for example:

- to check the transmission quality;
- to reject a participant by clearing the access;
- to contact the served user for administration reasons.

Specific in-band and/or out-band information may be sent to inform the participants of the addition of the operator. The operator is not included in the number of participants in the conference.

During the conference, the operator may be able to modify some parameters in response to a modification request coming from the served user:

- end time of the conference;
- maximum number of simultaneous participants.

NOTE – If the duration of the conference is reduced such that the in-band and/or out-band warning of the approaching end of the conference cannot be given, then the conference may be released without warning.

A call (to the conference equipment) received more than T minutes before the starting time shall be rejected.

In this case, specific in-band and/or out-band information related to the rejected call may be sent to the calling user.

3.3.4 Interrogation

Not applicable.

4 Network capabilities for charging

This Recommendation does not cover charging principles. Further Recommendations in the D-series are expected to contain that information. It shall be possible to charge the subscriber accurately for the service.

5 Interworking requirements

5.1 Interworking with non-ISDN networks

The conferees may belong to the PSTN or to any other network supporting circuit-mode services.

5.2 Interworking with private ISDNs

The conference can also be invoked by a user who is attached to a private network. Also parties who are attached to a private ISDN can participate in a conference.

6 Interaction with other supplementary services

6.1 Advice of charge services

6.1.1 Charging information at call set-up time (AOC-S)

Charges for the different connections to the conference bridge: no impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.1.2 Charging information during the call (AOC-D)

Charges for the different connections to the conference bridge: no impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.1.3 Charging information at the end of the call (AOC-E)

Charges for the different connections to the conference bridge: no impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.2 Call hold (HOLD)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.3 Call transfer

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – A service provider may take appropriate measures to prevent a connection to a conference from being transferred. The associated procedures are outside the scope of this Recommendation.

6.4 Call Waiting (CW)

Any participant should be able to receive an indication of a waiting call whilst he is engaged in a meet-me conference call. Then he may put on hold his call to the conference and subsequently answer the waiting call.

6.5 Closed User Group (CUG)

It may be possible for a service provider to allow exclusive access to a conference to members of a closed user group.

6.6 Completion of calls services

6.6.1 Completion of Calls on No Reply (CCNR)

An attempt to activate the completion of calls on no reply supplementary service on a call to a meet-me conference shall be rejected.

4 **Recommendation I.254.5** (05/97)

6.6.2 Completion of Calls to Busy Subscribers (CCBS)

An attempt to activate the completion of calls to busy subscribers supplementary service on a call to a meet-me conference shall be rejected.

6.7 Conference services

6.7.1 Conference Calling (CONF)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – A service provider may take appropriate measures to prevent a connection to a meet-me conference from being added to an add-on conference. The associated procedures are outside the scope of this Recommendation.

6.7.2 Meet-Me Conference (MMC)

Not applicable.

6.7.3 Preset Conference Calling (PCC)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – A service provider may take appropriate measures to prevent a connection to a meet-me conference from being joined with another connection to a preset conference. The associated procedures are outside the scope of this Recommendation.

6.7.4 Three-Party Service (3PTY)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – A service provider may take appropriate measures to prevent a connection to a conference from being joined with another connection into a three-way conversation. The associated procedures are outside the scope of this Recommendation.

6.8 Diversion services

6.8.1 Call Deflection (CD)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.8.2 Call Forwarding Busy (CFB)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.8.3 Call Forwarding No Reply (CFNR)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.8.4 Call Forwarding Unconditional (CFU)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.9 Direct-Dialling-In (DDI)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.10 In-call Modification (IM)

The in-call modification supplementary service shall not apply to conference calls.

6.11 ISDN Freephone Service (IFS)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.12 Line Hunting (LH)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.13 Malicious Call Identification (MCID)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.14 Multi-Level Precedence and Preemption (MLPP)

All connections to the conference are processed at a precedence level equal to the conference precedence selected by the served user. If a conferee is pre-empted, all conferees shall be notified in-band and/or out-band.

6.15 Multiple Subscriber Number (MSN)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.16 Name identification services

6.16.1 Calling Name Identification Presentation (CNIP)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.16.2 Calling Name Identification Restriction (CNIR)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.17 Number identification services

6.17.1 Calling Line Identification Presentation (CLIP)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.17.2 Calling Line Identification Restriction (CLIR)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.17.3 Connected Line Identification Presentation (COLP)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.17.4 Connected Line Identification Restriction (COLR)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.18 Outgoing Call Barring (OCB)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.19 Reverse Charging (REV)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.20 Sub-addressing (SUB)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.21 Support of Private Numbering Plans (SPNP)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.22 Terminal Portability (TP)

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.23 User-to-User signalling (UUS)

User-to-user signalling cannot be used when invoking the meet-me conference (Services 1 or 2) and during the meet-me conference (Service 3).

According to the procedures of the user-to-user signalling supplementary service, user-to-user information may be discarded, or the call to the conference rejected.

ITU-T RECOMMENDATIONS SERIES

Series A	Organization of the work of the 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 communication
Series Z	Programming languages