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**Integrated Services Digital Network (ISDN);
Meet-Me Conference (MMC) supplementary service
Service description**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Network Aspects (NA) Technical Committee of the European Telecommunications Standards Institute (ETSI).

In accordance with CCITT Recommendation I.130 [1], the following three level structure is used to describe the supplementary telecommunications services as provided by European public telecommunications operators under the pan-European Integrated Services Digital Network (ISDN):

- Stage 1: is an overall service description, from the user's standpoint;
- Stage 2: identifies the functional capabilities and information flows needed to support the service described in stage 1; and
- Stage 3: defines the signalling system protocols and switching functions needed to implement the service described in stage 1.

This ETS details the stage 1 aspects (overall service description) for the Meet-Me Conference (MMC) supplementary service. The stage 2 aspects are detailed in ETS 300 165 (1992). The individual calls in an MMC are each basic calls with no special signalling functions, therefore no stage 3 ETS is provided.

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1 Scope

This standard defines the stage one of the Meet-Me Conference (MMC) supplementary service for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators. Stage one is an overall service description from the user's point of view (see CCITT Recommendation I.130 [1]), but does not deal with the details of the human interface itself.

This standard defines the interworking requirements of private ISDNs with the public ISDN.

In addition this standard specifies the base functionality where the service is provided to the user via a private ISDN.

This standard does not specify the additional requirements where the service is provided to the user via a telecommunications network that is not an ISDN but does include interworking requirements of other networks with the public ISDN.

Interactions with supplementary services not listed in Clause 8 are outside the scope of this standard.

Charging principles are outside the scope of this standard.

The MMC supplementary service enables a user to arrange for a call between more than two participants. During the period the conference is active, participants use a special number to access the conference.

The MMC supplementary service is applicable to all circuit-switched telecommunications services carrying speech.

This standard is applicable to the stage two standard for the ISDN MMC supplementary service. The term "stage two" is also defined in CCITT Recommendation I.130 [1]. Where the text indicates the status of a requirement, (i.e. as strict command or prohibition, as authorisation leaving freedom, or as a capability or possibility), this shall be reflected in the text of the relevant stage two standard.

This standard is an application of the requirements contained in the basic call standards and therefore, conformance to this standard is met by conforming to the stage two standard with the field of application appropriate to the equipment being implemented. Therefore no method of testing is provided for this standard.

2 Normative references

This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] CCITT Recommendation I.130 (1988): "Method for the characterisation of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [2] CCITT Recommendation I.112 (1988): "Vocabulary of terms for ISDNs".
- [3] CCITT Recommendation I.210 (1988): "Principles of telecommunication services supported by an ISDN and the means used to describe them".
- [4] CCITT Recommendation Q.9 (1988): "Vocabulary of switching and signalling terms".
- [5] CCITT Recommendation E.164 (1988): "Numbering plan for the ISDN era".

3 Definitions

For the purposes of this standard, the following definitions apply:

Integrated Services Digital Network (ISDN): see CCITT Recommendation I.112 [2], § 3, definition 308.

Bearer service: see CCITT Recommendation I.112 [2], § 2.2, definition 202.

Service; telecommunications service: see CCITT Recommendation I.112 [2], § 2.2, definition 201.

Supplementary service: see CCITT Recommendation I.210 [3], § 2.4.

Served user: the user who booked the conference.

Conference: a call involving a number of users who can communicate simultaneously.

Participant; conferee: a user involved in the conference.

Special number: the ISDN number allocated for accessing the conference.

Operator: an entity in the network which provides automatic or manual supervisory functions for control of the MMC supplementary service.

Basic access: see CCITT Recommendation Q.9 [4], §1, definition 1551.

Primary rate access: see CCITT Recommendation Q.9 [4], §1, definition 1552.

ISDN number: a number conforming to the numbering plan and structure specified in CCITT Recommendation E.164 [5].

4 Symbols and abbreviations

ISDN	Integrated Services Digital Network
MMC	Meet-Me Conference
PSTN	Public Switched Telephone Network

5 Description

The MMC supplementary service shall apply to the basic access and to the primary rate access.

The MMC supplementary service enables a user to arrange for a call between more than two participants. During the period the conference is active, participants use a special number to access the conference.

The MMC supplementary service can be activated for a specified period booked by the served user.

During the period that the conference is activated, a special number is assigned to the conference. Each participant in the conference shall use this special number in order to access the conference. All notification shall be sent in-band.

6 Procedures

6.1 Provision and withdrawal

The MMC supplementary service shall be generally available without any prior arrangement with the service provider.

The MMC supplementary service can be withdrawn for service provider reasons.

6.2 Normal procedures

6.2.1 Activation, deactivation and registration

6.2.1.1 Activation

The MMC supplementary service shall be activated for a specified period booked by the served user.

NOTE: The time between booking and activation of the conference may be limited. There may be a predefined time period after booking before activation can occur.

6.2.1.2 Deactivation

At the end of the scheduled time of the conference, the conference shall be released, i.e. every participant still connected to the conference shall be automatically released.

Before the release operation, information shall be sent in-band to the participants in order to inform them of the approaching end of the conference. The served user can request an extension of the duration of the conference (see subclause 6.2.3.3).

6.2.1.3 Registration

The MMC supplementary service shall be booked by the served user. The associated procedure is outside the scope of this standard.

NOTE 1: This booking can be made via an operator or can be performed automatically (e.g. by using a videotex communication with a reservation centre).

The following information shall be provided by the served user when booking the conference:

- date of the conference;
- starting time;
- duration or end date and time;
- booked number of simultaneous participants (i.e. the maximum number of simultaneous participants requested by the served user for a particular conference).

NOTE 2: The served user may request to modify this information or to cancel the request for the conference prior to the start of the conference.

NOTE 3: The service provider may limit the maximum number of simultaneous participants in a conference.

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

The special number shall be indicated to the served user. The served user can indicate this number to other users as required.

NOTE 4: As a service provider option, a closed user group without incoming access may be temporarily allocated to the special number upon explicit request of the served user. This would enable members of a closed user group who have been informed of the special number to exclusively use the MMC supplementary service.

6.2.2 Erasure

Erasure shall occur automatically at the end of the period booked by the served user.

6.2.3 Invocation and operation

6.2.3.1 Access to the conference

Each prospective participant shall use the special number assigned to the conference in order to access the conference.

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 to the calling user in order to indicate that the conference will start soon. The value of T shall be set by the service provider. Before the starting time of the conference no communication shall be possible between the participants.

When the conference begins, the user shall be informed in-band as though they had just called the conference.

Information shall be sent in-band to each calling participant before access to the conference. The first participant shall continue to receive this in-band information until a second participant is added to the conference. The participants can then communicate with each other.

If the booked number of simultaneous participants has not been reached, access to a conference shall be available for the duration of the conference.

When two or more participants are connected to the conference, an indication shall be sent in-band to the existing participants each time a new participant is about to be connected. When the new participant is added to the conference, then the existing participants can communicate with the new participant.

6.2.3.2 Clearing of a participant

Each participant can leave the conference at any time.

6.2.3.3 Conference parameters modification request

NOTE 1: During the conference, the served user can request cancellation of the conference or modifications of the conference duration and/or of the booked number of simultaneous participants.

NOTE 2: If the duration of the conference is reduced such that the in-band warning of the approaching end of the conference cannot be given, then the conference may be released without warning.

6.2.3.4 Actions performed by the operator

As a service provider option the following procedures can be used.

At any time, an operator can connect to the conference in progress or individually to each participant for administrative reasons.

NOTE: For example, the operator can check the transmission quality, eject a participant, or contact the participants.

Information shall be sent in-band to inform the participants that the operator has joined the conference.

During the conference, the operator can modify the following parameters in response to a modification request from the served user:

- end date and time of the conference;
- booked number of simultaneous participants.

6.2.4 Interrogation

Interrogation procedures are outside the scope of this standard.

6.3 Exceptional procedures

6.3.1 Activation, deactivation and registration

Not applicable.

6.3.2 Erasure

Not applicable.

6.3.3 Invocation and operation

A call received more than T minutes before the starting time (see subclause 6.2.3.1) shall be rejected as a call to an unallocated number.

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

6.3.4 Interrogation

Not applicable.

7 Intercommunication considerations

7.1 Interworking with non-ISDNs

The conferees may belong to the PSTN or to any network supporting speech.

7.2 Interworking with private ISDNs

Users attached to a private ISDN can book a conference and can participate in a conference.

8 Interaction with other supplementary services

8.1 Advice of charge

8.1.1 Charging information at call setup time

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

8.1.2 Charging information during the call

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

8.1.3 Charging information at the end of the call

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

8.2 Call waiting

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

8.3 Call hold

Any party involved in a conference can place their connection to the conference on hold and later retrieve it.

Any party placing their connection to the conference on hold can retrieve any other call that party had previously placed on hold.

8.4 Explicit call transfer

Any participant can invoke the explicit call transfer supplementary service in order to transfer their connection to the conference to another user after that connection has been established.

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 standard.

8.5 Number identification services

8.5.1 Calling line identification presentation

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

8.5.2 Calling line identification restriction

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

8.5.3 Connected line identification presentation

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

8.5.4 Connected line identification restriction

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

8.6 Closed user group

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

8.7 Completion of calls to busy subscriber

An attempt to activate the completion of calls to busy subscriber supplementary service on a call to a conference shall be rejected.

8.8 Conference services

8.8.1 Conference call, add-on

A participant can be involved separately in a (meet-me) conference as well as in an (add-on) conference.

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 standard.

8.8.2 Meet-me conference

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

8.9 Direct dialling in

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

8.10 Diversion services

8.10.1 Call forwarding unconditional

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

8.10.2 Call forwarding busy

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

8.10.3 Call forwarding no reply

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

8.10.4 Call deflection

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

8.11 Freephone

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

8.12 Malicious call identification

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

8.13 Multiple subscriber number

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

8.14 Subaddressing

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

8.15 Terminal portability

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

8.16 Three party

A participant can be involved separately in a three-way conversation as well as in a conference.

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

8.17 User-to-user signalling

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

NOTE: The conference resource cannot accept user-to-user information. 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.

History

Document history	
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