



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

H.450.12

(07/2001)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS
Supplementary services for multimedia

**Common Information Additional Network
Feature for H.323**

ITU-T Recommendation H.450.12

(Formerly CCITT Recommendation)



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ITU-T H-SERIES RECOMMENDATIONS
AUDIOVISUAL AND MULTIMEDIA SYSTEMS

CHARACTERISTICS OF VISUAL TELEPHONE SYSTEMS	H.100–H.199
INFRASTRUCTURE OF AUDIOVISUAL SERVICES	
General	H.200–H.219
Transmission multiplexing and synchronization	H.220–H.229
Systems aspects	H.230–H.239
Communication procedures	H.240–H.259
Coding of moving video	H.260–H.279
Related systems aspects	H.280–H.299
SYSTEMS AND TERMINAL EQUIPMENT FOR AUDIOVISUAL SERVICES	H.300–H.399
SUPPLEMENTARY SERVICES FOR MULTIMEDIA	H.450–H.499

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

ITU-T Recommendation H.450.12

Common Information Additional Network Feature for H.323

Summary

This Supplementary Service describes the procedures and the signalling protocol for the Common Information Additional Network Feature in ITU-T H.323 (Packet-based Multimedia Communications Systems) networks.

ANF-CMN enables the exchange of Common Information between ANF-CMN endpoints. This Common Information is a collection of miscellaneous information that relates to the user or equipment at one end of a connection and includes one or more of the following: Feature Identifiers, Party Category.

This Recommendation makes use of the "Generic functional protocol for the support of supplementary services in ITU-T H.323" as defined in ITU-T H.450.1.

Source

ITU-T Recommendation H.450.12 was prepared by ITU-T Study Group 16 (2001-2004) and approved under the WTS Resolution 1 procedure on 29 July 2001.

FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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

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CONTENTS

		Page
1	Scope.....	1
2	References.....	1
3	Terms and definitions	1
4	Abbreviations and acronyms	2
5	ANF-CMN description	2
5.1	Normal procedures.....	2
5.1.1	Activation/deactivation/registration/interrogation.....	2
5.1.2	Invocation and operation	2
5.2	Exceptional procedures.....	3
5.2.1	Invocation and Operation	3
5.3	Interactions with other supplementary services.....	3
5.3.1	Call Transfer (SS-CT)	3
5.3.2	Call Forwarding Unconditional (SS-CFU).....	3
5.3.3	Call Forwarding Busy (SS-CFB).....	3
5.3.4	Call Forwarding on No Reply (SS-CFNR).....	3
5.3.5	Call Hold.....	3
5.3.6	Call Park/Call Pickup	3
5.3.7	Call Waiting.....	4
5.3.8	Message Waiting Indication	4
5.3.9	Name Presentation	4
5.3.10	Completion of Calls on No Reply (SS-CCNR).....	4
5.3.11	Completion of Calls on Busy Station (SS-CCBS).....	4
5.3.12	Call Offer (SS-CO)	4
5.3.13	Call Intrusion (SS-CI).....	4
6	Messages and information elements	4
6.1	Feature Identifier List	4
6.2	Feature values	6
6.2.1	SS-CI protection level	6
6.2.2	Party Category	6
6.3	Feature Control	6
7	Procedures.....	6
7.1	Actions at User A's Endpoint.....	7
7.1.1	Normal procedures	7
7.1.2	Exceptional procedures.....	7
7.2	Actions at User B's Endpoint.....	8
7.2.1	Normal procedures	8

	Page
7.2.2 Exceptional procedures.....	8
8 Primitives.....	9
8.1 Common Information Primitives.....	9
8.2 Primitive definitions.....	9
8.3 Parameter definitions.....	9
9 Interworking and interactions.....	10
9.1 Interworking with an SCN.....	10
9.2 Protocol interaction between ANF-CMN and other supplementary services.....	10
9.2.1 Call Transfer (ITU-T H.450.2).....	10
9.2.2 Call Diversion (ITU-T H.450.3).....	10
9.2.3 Call Hold (ITU-T H.450.4).....	11
9.2.4 Call Park and Call Pickup (ITU-T H.450.5).....	11
9.2.5 Call Waiting (ITU-T H.450.6).....	11
9.2.6 Message Waiting (ITU-T H.450.7).....	11
9.2.7 Name Presentation (ITU-T H.450.8).....	11
9.2.8 Call Completion (ITU-T H.450.9).....	11
9.2.9 Call Offer (SS-CO).....	11
9.2.10 Call Intrusion (SS-CI).....	11
10 Gatekeeper actions.....	12
11 Dynamic description.....	12
11.1 Operational model and signal flows.....	12
11.1.1 Operational model.....	12
11.1.2 Example message sequence for normal operation of ANF-CMN for the solicited service.....	13
11.1.3 Example message sequence for normal operation of ANF-CMN for the unsolicited service.....	14
11.2 Timers.....	14
11.2.1 Timer T1.....	14
12 Operations in support of Common Information Network service.....	15
13 Specification and Description Language (SDL) Diagrams for ANF-CMN.....	17
13.1 Behaviour of the endpoints using explicit primitive exchange.....	19
13.2 Behaviour of the Endpoints using implicit application information exchange.....	23

ITU-T Recommendation H.450.12

Common Information Additional Network Feature for H.323

1 Scope

This Recommendation describes supplementary services the Additional Network Feature Common Information (ANF-CMN), which is applicable to various basic services supported by ITU-T H.323 multimedia endpoints.

ANF-CMN allows the exchange of Common Information between ANF-CMN endpoints.

This Recommendation requires ITU-T H.323 version 2 (1998) or later. Version 2 products can be identified by ITU-T H.225.0 messages containing a **protocolIdentifier** = {itu-t (0) recommendation (0) h (8) 2250 version (0) 2} and ITU-T H.245 messages containing a **protocolIdentifier** = {itu-t (0) recommendation (0) h (8) 245 version (0) 3}.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of the Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- ITU-T H.225.0 Version 4 (2000), *Call signalling protocols and media stream packetization for packet-based multimedia communication systems*.
- ITU-T H.245 Version 6 (2000), *Control protocol for multimedia communication*.
- ITU-T H.323 Version 4 (2000), *Packet-based multimedia communications systems*.
- ITU-T H.450.1 (1998), *Generic functional protocol for the support of supplementary services in H.323*.
- ITU-T H.450.2 (1998), *Call transfer supplementary service for H.323*.
- ITU-T H.450.3 (1998), *Call diversion supplementary service for H.323*.
- ITU-T H.450.4 (1999), *Call hold supplementary service for H.323*.
- ITU-T H.450.5 (1999), *Call park and call pickup supplementary services for H.323*.
- ITU-T H.450.7 (1999), *Message waiting indication supplementary service for H.323*.
- ITU-T H.450.9 (2000), *Call completion supplementary services for H.323*.
- ITU-T H.450.10 (2001), *Call offer supplementary service for H.323*.
- ITU-T H.450.11 (2001), *Call intrusion supplementary service for H.323*.

3 Terms and definitions

This Recommendation defines the following terms:

3.1 Endpoint; gatekeeper; gateway; terminal; user: See ITU-T H.323.

3.2 Forward Direction: The direction of the connection from the party invoking ANF-CMN to the other party in the call

3.3 ITU-T H.323 Call: Refer to ITU-T H.323.

- 3.4 Proxy:** An entity that acts on behalf of an endpoint. The proxy may or may not be co-located with the gatekeeper.
- 3.5 Reverse Direction:** The direction opposite to the forward direction.
- 3.6 User A:** Originating user that originated the call or requested the additional network feature.
- 3.7 User B:** The remote user that was initially addressed.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

ANF	Additional Network Feature
ANF-CMN	ANF Common Information
APDU	Application Protocol Data Unit
ASN.1	Abstract Syntax Notation one
IE	Information Element
NFE	Network Facility Extension
SDL	Specification and Description Language
SS	Supplementary Service

5 ANF-CMN description

ANF-CMN is an additional network feature that enables the exchange of Common Information between ANF-CMN endpoints. This Common Information is a collection of miscellaneous information that relates to the endpoint or equipment at one end of a connection and includes one or more of the following: Feature Identifiers, Feature Values, or Feature Controls. This information, when received by an ANF-CMN endpoint, can be used for any purpose, e.g. as the basis for indications to the local user or to another network or in order to filter feature requests.

A solicited and an unsolicited service can be offered to an ANF-CMN endpoint (which may be located at either end of a connection).

The solicited service enables the ANF-CMN endpoint to request the Common Information from a peer ANF-CMN endpoint.

The unsolicited service enables an ANF-CMN endpoint to supply Common Information to a peer ANF-CMN endpoint.

These services may be combined and are not mutually exclusive.

5.1 Normal procedures

5.1.1 Activation/deactivation/registration/interrogation

ANF-CMN is permanently activated.

5.1.2 Invocation and operation

The conditions under which ANF-CMN is invoked is an implementation matter. Also, Common Information offered by an endpoint is an implementation matter.

An ANF-CMN endpoint may invoke ANF-CMN at any time during a call

- to send its own Common Information to the peer ANF-CMN endpoint (unsolicited service);
- to request the Common Information of the peer ANF-CMN endpoint (solicited service).

Sending and requesting the Common Information may be combined.

NOTE – Typically, the Common Information is exchanged during the establishment phase of a call and after call rearrangement.

On receiving a request for Common Information, the receiving ANF-CMN user shall respond with its Common Information.

5.2 Exceptional procedures

5.2.1 Invocation and Operation

If no response is received on a request for Common Information (solicited service), the action to be taken shall be implementation dependent.

5.3 Interactions with other supplementary services

5.3.1 Call Transfer (SS-CT)

Common Information relating to the transferred endpoint and the transferred to end point may be sent as part of the transferred call establishment. Otherwise, the information shall be sent subsequent to the transfer.

5.3.2 Call Forwarding Unconditional (SS-CFU)

Common Information relating to the originating end of a call sent at the time of the call establishment request shall, if the call is diverted, be diverted to the ANF-CMN user at the terminating end of the diverted call.

5.3.3 Call Forwarding Busy (SS-CFB)

Clause 5.3.2 shall apply.

5.3.4 Call Forwarding on No Reply (SS-CFNR)

Unsolicited Common Information relating to the originating end of a call sent at the time of the call establishment request shall, if the call is diverted, be diverted to the ANF-CMN user at the terminating end of the diverted call.

A request for solicited Common Information from the originating end of a call sent at the time of the call establishment request shall not, if the call is diverted, be diverted to the ANF-CMN user at the terminating end of the diverted call.

5.3.5 Call Hold

No interaction.

5.3.6 Call Park/Call Pickup

Common Information relating to the parked endpoint and the parked to endpoint may be sent as part of the parking call establishment. Otherwise, it shall be sent subsequent to Call Park.

Common Information relating to the parked endpoint and the unparking endpoint may be sent as part of the unparking call establishment. Otherwise, it shall be sent subsequent to unpark.