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H.200

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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

General

**FRAMEWORK FOR RECOMMENDATIONS FOR
AUDIOVISUAL SERVICES**

Reedition of CCITT Recommendation H.200 published in
the Blue Book, Fascicle III.6 (1988)

NOTES

1 CCITT Recommendation H.200 was published in Fascicle III.6 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

FRAMEWORK FOR RECOMMENDATIONS FOR AUDIOVISUAL SERVICES

(Melbourne, 1988)

1 Audiovisual services

A number of services are, or will be, defined in CCITT having as their common characteristic the transmission of speech together with other information reaching the eventual user in visual form. This Recommendation concerns a set of such services which should be treated in a harmonised way; it is convenient to refer to the members of this set as “audiovisual services” (abbreviated to AV services).

2 Harmonisation of audiovisual services

While the various audiovisual services may easily be distinguished in terms of their user-application, common methods are used for the transport of signals representing speech, moving or still pictures, and associated controls/indications, and also telematic auxiliary facilities. The standardisation process seeks the greatest possible harmonisation of these common features, confining the distinction to the application layers wherever possible, in order to:

- a) Maximise the possibilities for intercommunication between terminals intended for different applications;
- b) Maximise the commonality of hardware and software in the interests of economies of scale. The scope for commonality includes: audio and video input/output parameters, audio and video codecs, the control/indication set, frame structures and multiplexing, call control procedures (including multipoint).

The embodiment of this harmonisation policy will be a consistent set of Recommendations, consistent in the sense that all members of the set take into account all other members.

3 Purpose of this Recommendation

The purpose of this Recommendation H.200 is to define the set that shall be consistent. In fulfilling this function it is important to distinguish, at a given time, between Recommendations and draft Recommendations.

Recommendations are members of the set by virtue of their consistency with other adopted members of the set: these are listed in Annex A to this Recommendation. It is of course necessary to ensure continued consistency when amendments are introduced.

Draft Recommendations range from mere titles or outline contents through varying stages of maturity to a stable final draft. As many different intended members of the Recommendation H.200 set are developed in parallel to ensure consistency they should be treated as “provisional” members of the set. The list of set members including provisional items does not form part of Recommendation H.200, but this Recommendation H.200 should be updated in the future to include new members of the set formally adopted.

4 Framework

Recommendations in the H.200 set are arranged in three main sections:

Service definitions : These specify the service as seen by the user, including basic service, optional enhancements, quality, and intercommunication requirements, together with operational aspects; technical implementation methods are taken into account but not defined herein.

Infrastructure : This section includes all the Recommendations which are applicable to two or more distinct services: these encompass network configuration, frame structures, control/indications, communication/intercommunication, and audio/video coding. The “infrastructure” includes this generality of signals which flow on unrestricted digital bearers on established network connections – it does not include the methods of call establishment and control, orchestrated by signals outside these bearers.

Systems and terminal equipment : This section deals with the technical implementation of specific services: it therefore includes service-specific equipment for the application layer, and draws upon the infrastructure Recommendations to identify the detailed processes required for the particular service.

A *network aspects* section is also proposed, to cover those matters which are particular to AV services but, involving out-of-band signals, do not come within the scope of the infrastructure section above.

5 List of audiovisual services covered

The following audiovisual services shall be included in the harmonized set:

- narrowband videophone (1 and 2×64 kbit/s under study);
- broadband videophone (a teleservice for broadband ISDN);
- narrowband videoconferencing ($n \times 384$ kbit/s and $m \times 64$ kbit/s under study);
- broadband videoconferencing (a teleservice for broadband ISDN);
- audiographic teleconferencing;
- telephony (a degenerate case of an AV service, included for intercommunication purposes);
- telesurveillance.

The following audiovisual services are in the process of being defined, and consideration should be given to their inclusion in the set for either of the reasons given in § 2:

- video mail;
- videotex (including pictures and sound);
- video retrieval;
- high resolution image retrieval;
- distribution services.

ANNEX A

(to Recommendation H.200)

Framework for Recommendations for audiovisual services

CCITT Rec. No.

A.1	<i>Service definition</i>	
	AV100 General Recommendation for AV services	F.700
	AV110 Teleconference services	F.710
	AV111	
	AV112	
	AV120 (Videophone services)	
	AV121 Basic narrow-band videophone service in the ISDN	F.721
A.2	<i>Infrastructure</i>	
	AV200 (General Recommendation for AV service infrastructure)	
	AV210 (Reference network configuration)	
	AV220 (General Recommendation for frame structures)	
	AV221 Frame structure for a 64 kbit/s channel in audiovisual teleservices	H.221
	AV222 Frame structure for 384-1920 kbit/s channels audiovisual teleservices	H.222
	AV230 (AV system control and indications)	
	AV240 (Principles for communication between AV terminals)	
	AV241 System aspects for the use of the 7 kHz audio codec within 64 kbit/s	G.725
	AV242	
	AV250 (Audio coding)	
	AV251 Narrow-band audio coding at 64 kbit/s	G.711
	AV252 Wideband audio coding in 64 kbit/s	G.722
	AV253	
	AV254	
	AV260 (Video coding)	
	AV261 $n \times 384$ kbit/s video codec	H.261
	AV262	
A.3	<i>Systems and terminal equipment</i>	
	AV300 (General Recommendations for AV systems and terminals)	
	AV310 (Requirements for teleconferencing)	
	AV311	
	AV312	
	AV313 (Teleconference protocol)	
	AV320 (Requirements for videophone services)	

A.4 *Network aspects*

AV400

- AV410 (Reservation systems)
- AV420 (HLC for use in audiovisual calls)
- AV430 (Call control command & indication)
- AV440 (Multipoint call set-up)

Note 1 – It is intended to merge the substance of existing Recommendations H.100 and H.110 into this framework in the next study period.

Note 2 – Entries in parentheses are indicative of the purpose of the various positions in the framework.

Note 3 – Further Recommendations will be added to the list as they are formally adopted.

ITU-T H-SERIES RECOMMENDATIONS
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Characteristics of transmission channels used for other than telephone purposes	H.10–H.19
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Telephone-type circuits used for facsimile telegraphy	H.40–H.49
Characteristics of data signals	H.50–H.99
CHARACTERISTICS OF VISUAL TELEPHONE SYSTEMS	H.100–H.199
INFRASTRUCTURE OF AUDIOVISUAL SERVICES	
General	H.200–H.219
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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 ITU-T List of Recommendations.

ITU-T RECOMMENDATIONS SERIES

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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
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Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
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