

CCITT SGXV Specialist Group on Coding
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Title: PRESS RELEASE FROM SPECIALISTS GROUP

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The purpose of this document is to assist in the drafting of a Press Release from the Specialists Group. Our purpose should be to clarify the situation in the Commercial and General Press on Standards for Low Bit Rate Moving Video Codecs.

DRAFT STATEMENT

Standardisation activities in CCITT concerned with Low Bit Rate Moving Video Codecs take place in Study Group XV. Within SG XV there is a Working Party considering a number of questions, one being that concerned with methods of coding low bit rate video in the range of 64kbit/s to 2Mbit/s.

CCITT operates in 4 year cycles called study periods. The 1984-88 study period has just finished with a formal plenary meeting in Australia in November 1988, where Recommendations produced by the various Working Parties were formally agreed. There Recommendations will be published in a series of 'Blue Books' which will be available in 1989.

In the area of low bit rate moving video codecs, two Recommendations will appear in the Blue Books:-

Recommendation H.120 - which was originally produced at the end of the 1980-84 study period and has now been updated and covers the range of bit rates from 768kbit/s-2Mbit/s. All videoconferencing systems currently in service and compliant with CCITT Recommendations currently conform to this Recommendation.

Recommendation H.261 - which is a Recommendation for codecs operating at $n \times 384\text{kbit/s}$ where n can have all integer values from 1-5.

Recommendation H.261 has been the result of activities within a Picture Coding Specialists Group set up by the Working Party and chaired by S Okubo from Japan. The Recommendation entering the Blue Book is incomplete as a number of items are still under study. A second topic of study within this Specialists Group has been coding for $m \times 64\text{kbit/s}$ where m can have integer values 1 to 6.

Recent results on the algorithm studies for the H261 Recommendation have indicated that the algorithm chosen is sufficiently flexible so that it can be extended with good performance down to 64kbit/s. Furthermore the evidence obtained in the Specialist Group suggests that the algorithm reflects the current state of the art in low bit rate video coding. The Specialist Group has therefore decided that it is no longer necessary to work on 2 independent Recommendations for the purposes of optimum coding performance. It is therefore the intention to complete H261 as rapidly as possible and extend the scope of this Recommendation such that it will become a worldwide standard for coding at all bit rates from 64kbit/s to 2Mbit/s.

A time-table of work has been agreed which will result in a complete $p \times 64\text{kbit/s}$ Recommendation, verified by hardware experiments, by the end of October 1989 containing sufficient detail to allow manufacturers to design codecs and VLSI devices. No changes to the $p \times 64\text{kbit/s}$ specification will be allowed after this date except corrections and clarifications. The intention is to ensure that this complete $p \times 64\text{kbit/s}$ specification

gains "provisional Recommendation" status by means of the CCITT accelerated procedure by July 1990. Furthermore it is the intention to formally register the p x 64kbit/s Recommendation by means of adopting the accelerated procedure in March 1989 for an outline specification of p x 64kbit/s although it will not be possible by this date to have completed all the detail. The main intention of this interim provisional Recommendation is to indicate to interested parties that CCITT is concentrating on a single Recommendation and making good progress.

Both H.120 and H.261 Recommendations will co-exist and a Specification will be produced for transcoding between both standards.

Both standards are world-wide Recommendations, they cover operation in all networks irrespective of whether the hierarchy is based on the CEPT 2Mbit/s or the Japanese and North American 1.5Mbit/s building blocks and irrespective of whether the local video standard is PAL, NTSC or SECAM.

Recommendation H.261 has been developed to be suitable for video telephony on the basic ISDN's, videoconferencing and other applications where good but not broadcast quality video performance is required. It is the result of several 100 man years of effort in Research Laboratories around the world and an outstanding example of international, pre-competitive collaborative research. It is the intention of the specifiers that this standard should endure through until the next century.