

# Speech to the EBU Technical Committee

**Robert Hopkins**

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Mr. Chairman,

Thank you for the opportunity you have given me to address this distinguished group. I would like, first, to make some comments regarding decisions that have preceded us here today. The topic of high definition television is not a new topic. There have been documents placed before the CCIR for over 10 years. Decision 58 of the CCIR in 1983 established the Interim Working Party 11/6 with specific terms of reference including:

1. to encourage administrations to participate in a coordinated way in the study of a high definition television standard for the studio, for international program exchange, and for broadcasting;
2. to prepare, within the present study period, a draft Recommendation for a single worldwide high definition television standard for the studio and for international program exchange, to be submitted to Study Group 11;
3. subsequently, to prepare a draft Recommendation on the processing of the HDTV studio signal to adapt it, as may be required, to the specific constraints of transmission, distribution and broadcasting, as these constraints become more clearly defined.

The World Broadcasting Unions, meeting in Algiers in 1983, recommended:

4. that the Broadcasting Unions should encourage their members to carry out studies on the preferred characteristics of a uniform world standard for a high definition television system;
5. that the Broadcasting Unions should coordinate their studies on high definition television systems;
6. that the Broadcasting Unions should concentrate these studies at first on a single HDTV production standard extending them later to broadcast and transmission.

The EBU in 1984 published a press release that stated in part:

“In 1983, all the world's nine Broadcasting Unions were signatories of a Recommendation to work toward worldwide standards for high definition television. This, in itself, did not imply that high definition television services will be broadcast in the near future in all parts of the world, but was, rather, a recognition of the need to coordinate studies from the early stages. Events in the past have shown that this is the only way to ensure that all interests are taken into account and to ensure worldwide agreement.”

The EBU has undertaken studies in support of the 1983 Inter-Union Recommendation on HDTV and with a timescale following the declared wishes of Study Group 11.

The timescale envisaged by the CCIR, which the ATSC and the EBU are endeavoring to work towards, is for the HDTV television production standard to be agreed at the Final Meetings of

CCIR Study Group 11 in October 1985. This would be the first step towards the development, during future CCIR study periods, of a uniform world standard for a high definition television system.

With these previous events in mind, Mr. Chairman, the United States Advanced Television Systems Committee, the ATSC, after due consideration, has forwarded the document before you, TEMP 4, to the American State Department for its use in formulating the United States position on high definition television. The document is the ATSC recommendation for a single worldwide high definition television standard for the studio and for international program exchange. It was unanimously approved by the ATSC Executive Committee two weeks ago. The document was the output of the ATSC HDTV Technology Group in March of this year.

If I may refer to the last page of the document, note that paragraphs 1, 2, and 3 recommend a single worldwide standard based on the parameter values of 1,125 lines, 60 fields per second, 2:1 interlace, and an aspect ratio of 5.33:3. Paragraph 5 recommends that study continue on other parameter values not specified in the document while Paragraph 4, with an eye to developments of the future, recommends that study continue, during the next CCIR study period, to determine if any advantages could result from using progressive scanning in a camera or monitor, for instance, while maintaining the studio standard of 2:1 interlace.

The Table gives parameter values not mentioned explicitly in the Recommendations. Note that these values have been selected to be totally compatible with CCIR Recommendation 601.

Howard Jones, of the BBC, presented a paper at the IBC in 1980 which I found very interesting. He was discussing the concept of standardization being too early or too late. He indicated that often the technical community will argue that standardization is coming too early and not enough technical details are known or understood. He pointed out that, unfortunately, too late often occurs because the political community has made its decision and has become committed to a specific set of parameter values and cannot compromise.

We must be very careful of reaching the stage Howard called "too late." Too late means we document the chaos of multiple standards. Type B and Type C is too late. VHS and Beta is too late. Betacam and Type M is too late. PAL and SECAM and NTSC is too late.

If I may take a few more moments of your time, permit me to describe a situation that occurred in the United States in 1904. A fire broke out in Baltimore. Within 10 minutes an explosion spread the fire to neighboring buildings. A telegram was sent to the Washington fire department indicating that help was needed desperately. The Washington firemen made the journey in a record 38 minutes, but, upon arrival, found that their fire hoses would not fit the nozzles on the Baltimore fire hydrants. Several other fire departments made the trip to Baltimore, but they, too, found that they could not use their hoses. Extensive damage was suffered from the 30 hour blaze. There was no shortage of water – only a shortage of hoses that fit the nozzles.

Mr. Chairman, I believe the time has arrived for us to specify a single worldwide standard for high definition television. CCIR Recommendation 601 was a step in the right direction, but we must go much farther. Let us learn from the experience of the Baltimore fire department and approve a single standard during this study period of the CCIR rather than have the confusion – and chaos – of multiple standards.

Thank you.