RECOMMENDATION 785*

THE RELEASE OF PROGRAMMES IN A MULTIMEDIA ENVIRONMENT

(Question 110/11)

(1992)

The CCIR,

considering

a) that programmes can be produced for release on a variety of media;

b) that end-user television installations can desirably be conceived to use programmes delivered through a variety of media;

c) that the same concept applies to audio programmes and audio end-user installations;

d) that there is a need to ensure harmonization of standards between programme generation and programme "fruition";

e) that the terms of the CCIR cooperation with the IEC and the ISO are described in Opinion 16,

recommends

1. that, in the case of the production of programmes intended for multimedia release, the programme quality should be commensurate with the quality capability of the most demanding medium envisaged;

2. that, in the case of the production of programmes for a given service, the quality capability of the various elements in the total chain from production to fruition should be commensurate with the intended service;

3. that harmonized technical standards be used whenever possible and appropriate for broadcast and for non-broadcast applications in production facilities as well as in consumer equipment.

Note 1 – Information on a multimedia environment is given in Annex 1.

ANNEX 1

1. Introduction

The development of audiovisual media has progressed in a way that makes it more necessary than ever to harmonize the standardization that takes place in the CCIR, the IEC, and in the ISO respectively.

The increasing integration of film and electronic methods in the production of programmes for both broadcasting and cinema release must be considered in the distribution of the work. Account must therefore be taken of the important work of the ISO regarding standards for the production and distribution of programmes on film.

The terms of cooperation among the CCIR, the ISO and the IEC are covered in Opinion 16.

2. The multimedia environment

It is recognized that the IEC has a wide field of action, extending well outside the broadcast equipment field, whilst the CCIR deals with broadcast systems only. Harmonization of efforts is needed in the common area of these fields of action, i.e. where the produced audiovisual message is transmitted and received.

The message itself may take several forms; it may be a television programme (entertainment, education, news, etc.), a recorded audio document, a Teletext page, a movie, a computer output, etc.

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* The Director, CCIR, is requested to bring this Recommendation to the attention of the IEC and the ISO.

The production of the message may use a variety of means and methods: normal television, high-definition television, high quality audio recording, film, etc.

The fruition of the message may also happen in a variety of ways; on the home television display, by collective television or cinema displays, on computer displays and printouts, etc.

The production installation can be seen as a production and post-production facility that generates programmes for diversified outlets, e.g. in the case of television, terrestrial or satellite broadcasting, videodisc or video-cassette distribution facilities, cable systems, movie-theatre chains, etc.

The end-user installation may be seen, in the case of television, as a display (home or collective or professional), which is fed by a variety of consumer devices, e.g. terrestrial broadcasting tuner, satellite tuner, Teletext decoder, video-cassette player, videodisc player, cable terminal, computer interface, etc.

In the case of an audio message, the same concepts apply; the end-user installation takes the form of audio amplifiers and loudspeaker units or headphones fed from a variety of consumer devices, e.g. terrestrial or satellite broadcast tuner, wire distribution tuner, cassette player, disc or CD player, etc.

Furthermore, an audio user installation may also represent the audio part of a television user installation and receive signals from some of the television devices exemplified above.

In addition, both the video and the audio installation may output programme signals to some peripheral equipment, such as a cassette recorder and there may also be cross ties, e.g. in the case of an audio user installation that receives a radiodata signal, decodes it and outputs the information in image form on the television display.

There is a need to ensure technical harmonization between message generation and message fruition from several viewpoints.

Specifically, the following aspects can be highlighted:

2.1 Production quality commensurate to the highest service intended

It is important that the sound and picture quality at generation be commensurate to the quality requirements of the most quality-demanding service among those for which the production is intended, if the production is generated for multimedia distribution. For instance, the picture quality capability for electronic distribution of movies to cinemas is obviously much greater than that required for normal television broadcasting to the home.

This aspect is of interest to broadcasters, since they often generate productions for multimedia distribution. It is also of interest to broadcasters when they broadcast productions generated elsewhere, since it is their role to define and protect the picture and sound quality of the broadcast service they operate.

2.2 Harmonized quality capability throughout a service chain

For any given service it is important that the sound and picture quality capability of the various elements in the total chain from production to fruition, be commensurate to the intended service. This quality requirement for sound and picture particularly applies to the recording process (and to the digital recording process) inserted in the chain; it applies as well to the quality capability of the picture display or listening unit used.

2.3 Harmonized standards and operating practices between broadcast and non-broadcast audiovisual applications

It would, of course, be highly desirable that harmonized technical standards and operating practices be applied, where appropriate, in consumer equipment intended for broadcast applications and for non-broadcast applications. This would ease the interconnection of the components of a unified consumer audio and video presentation system.

It would also be highly beneficial that harmonized technical standards and operating practices be applied, where possible and appropriate, in programme production facilities operated by broadcasters and in consumer equipment.

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