

QUESTION ITU-R 55/6

Subjective assessment of sound quality in broadcasting using digital techniques

(1990-1993-1994)

The ITU Radiocommunication Assembly,

considering

- a) that the introduction of digital techniques in the studio, in transmission circuits and at the transmitter should allow an improvement in quality and more efficient operational use;
- b) that these techniques entail their own specific signal impairments;
- c) that it is desirable to ensure high quality performance throughout the broadcasting chain without unnecessary expense,

decides that the following question should be studied

- 1 What is the relation between subjective assessment and objective measurements for digital systems?
- 2 What are the tolerable values of subjective impairment in the whole broadcasting chain?
- 3 What is the subjective effect of the various studio processes on the digital signal (level changes, frequency response corrections, etc.)?
- 4 What is the maximum number of times that processing of any kind may be applied to the signal in the studio and the associated subjective effect?
- 5 What are the acceptable values of impairment (expressed in objective terms):
 - in recording equipment;
 - in other studio equipment;
 - in broadcasting emissions?

NOTE 1 – Digital signals used in the studio may differ from those used for transmission.

NOTE 2 – See in particular Report ITU-R BS.799.

NOTE 3 – The studies should also include a comparison with the best analogue techniques.

NOTE 4 – Close cooperation between Radiocommunication Study Group 6 and Telecommunication Standardization Study Group 9 will be required in this study,

further decides

- 1 that the results of the above studies should be included in (a) Recommendation(s);
- 2 that the above studies should be completed by 2006.

