INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

J.100

(ex CMTT.717)

(06/90)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

TELEVISION AND SOUND TRANSMISSION

TOLERANCES FOR TRANSMISSION TIME DIFFERENCES BETWEEN THE VISION AND SOUND COMPONENTS OF A TELEVISION SIGNAL

ITU-T Recommendation J.100

(Formerly Recommendation ITU-R CMTT.717)

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation J.100 (formerly Recommendation ITU-R CMTT.717) was elaborated by the former ITU-R Study Group CMTT. See Note 1 below.

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector (ITU-R).

Conforming to a joint decision by the World Telecommunication Standardization Conference (Helsinki, March 1993) and the Radiocommunication Assembly (Geneva, November 1993), the ITU-R Study Group CMTT was transferred to ITU-T as Study Group 9, except for the satellite news gathering (SNG) study area which was transferred to ITU-R Study Group 4.

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

Recommendation J.100[1)]

TOLERANCES FOR TRANSMISSION TIME DIFFERENCES BETWEEN THE VISION AND SOUND COMPONENTS OF A TELEVISION SIGNAL

(1990)

The CCIR,

CONSIDERING

a) that a perceptible time difference between the sound and vision components of a television signal impairs the viewer's enjoyment of the programme;

b) that Report 1081 gives figures for time differences between sound and vision components that are "detectable" and "subjectively annoying";

c) that the effect is less critical when the sound is delayed with respect to the picture;

d) that transmission links are not the only elements in the broadcast chain that may cause a time difference between sound and vision components;

e) that the time difference between sound and vision components introduced by a transmission link is not necessarily related to the length of the link,

UNANIMOUSLY RECOMMENDS

that for any connection used for the international exchange of television signals the time difference between the sound and vision components should not exceed 20 ms if the sound is advanced with respect to the picture or 40 ms if the sound is delayed with respect to the picture.

Note – The application of these values to circuits is a subject for further study.

1) Formerly Recommendation ITU-R CMTT.717.