INTERNATIONAL TELECOMMUNICATION UNION

ITU-T J.12

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

TELEVISION AND SOUND TRANSMISSION

TYPES OF SOUND - PROGRAMME CIRCUITS ESTABLISHED OVER THE INTERNATIONAL TELEPHONE NETWORK

ITU-T Recommendation J.12

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation J.12 was published in Fascicle III.6 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

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

Recommendation J.12

TYPES OF SOUND-PROGRAMME CIRCUITS ESTABLISHED OVER THE INTERNATIONAL TELEPHONE NETWORK

(former Recommendation J.11; amended at Geneva, 1972 and 1980, and at Melbourne, 1988)

The CCITT recognizes the types of sound-programme circuits defined below.

Note – For the purposes of this Recommendation and other Recommendations in the Series J, sound-programme circuits have been classified in terms of the nominal effectively transmitted bandwith. For convenience, the corresponding type of circuit from the administrative point of view (see Recommendation D.180 [1]) is given under each type of equipment in the following paragraphs.

1 15 kHz-type sound-programme circuit

This type of circuit is recommended for high-quality monophonic programme transmission and in certain arrangements is also recommended for stereophonic transmissions. This type of circuits corresponds to the "very wideband circuits" or "stereophonic pair", as appropriate, referred to in Recommendation D.180 [1].

The performance characteristics of 15 kHz-type sound-programme circuits suitable for both monophonic and stereophonic transmissions are defined in Recommendation J.21 and suitable equipment is specified in Recommendation J.31, for analogue transmission and in Recommendations J.41, G.735 and G.737 for digital transmission.

2 10 kHz-type sound-programme circuit

This type of circuit, previously known as the "normal programme circuit, type A", is recommended for monophonic transmission only. This type of circuit corresponds to the "wideband circuit" referred to in Recommendation D.180 [1]. The performance characteristics or 10 kHz-type sound-programme circuits are defined in Recommendation J.22 and suitable methods of provision are given in Recommendation J.32.

Note – Recommendations J.22 and J.32 are reproduced in Fascicle III.4 or the *Red Book*, ITU, Geneva, 1985.

3 Narrow bandwith sound-programme circuit (7 and 5 kHz-type sound-programme circuit)

These types of circuits are recommended:

- for setting up a large number of temporary sound-programme circuits for the transmission of commentaries and reports on events of large interest (e.g sporting events); and
- for permanent sound-programme circuits which are used primarily for speech transmission or as connection between studio outputs and long-, medium- or short-wave broadcast-transmitter inputs.

The performance characteristics of narrow bandwith sound-programme circuits are defined in Recommendation J.32, and as suitable equipment for 7 kHz-type circuit is specified in Recommendation J.34, for analogue transmission.

Note – These types of circuits fall within the category of "medium-band circuits" referred to in Recommendation D.180 [1] for tariff purposes.

4 Use or ordinary telephone circuits

For this type of transmission of special programmes such as speech, some operational aspects are given in Recommendation N.15 [2].

References

[1] CCITT Recommendation *Occasional provision of circuits for international sound- and television-programme transmissions*, Vol. II, Rec. D.180.

[2] CCITT Recommendation *Maximum permissible power during an international sound-programme transmission*, Vol. IV, Rec. N.15.