



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

N.2

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

**MAINTENANCE OF INTERNATIONAL
SOUND - PROGRAMME AND TELEVISION
TRANSMISSION CIRCUITS**

**DIFFERENTS TYPES
OF SOUND - PROGRAMME CIRCUIT**

ITU-T Recommendation N.2

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation N.2 was published in Fascicle IV.3 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.

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Recommendation N.2

DIFFERENT TYPES OF SOUND-PROGRAMME CIRCUIT¹⁾

The characteristics of the various types of international sound-programme circuit defined in Recommendations J.21 [1], J.22 [2] and J.23 [3] are as follows:

15 kHz;

10 kHz;

5, 6.4 and 7 kHz.

From the point of view of sound-programme transmission ordinary telephone circuits are generally considered to be suitable only for the transmission of speech. It should be noted that the limits of the loss/frequency distortion cannot be guaranteed to be better than the limits shown in Recommendation M.580 [4].

When a telephone circuit is used for a sound-programme transmission the terminating sets and the signalling equipment must be disconnected to avoid echo effects and false operation of the signal receiver.

When a telephone circuit is used for a sound-programme transmission, a point of zero relative level of the telephone circuit must coincide with a point of zero relative level on the sound-programme circuit. (However, see § 2 of Recommendation N.15 in which it is pointed out that a 6-dB loss should be introduced in order to reduce the mean power level delivered to the telephone circuit system).

References

- [1] CCITT Recommendation *Performance characteristics of 15 kHz type sound-programme circuits*, Vol. III, Rec. J.21.
- [2] CCITT Recommendation *Performance characteristics of 10 kHz type sound-programme circuits*, Red Book, Vol. III, Rec. J.22, ITU, Geneva, 1984.
- [3] CCITT Recommendation *Performance characteristics of narrow-bandwidth sound-programme circuits*, Vol. III, Rec. J.23.
- [4] CCITT Recommendation *Setting up and lining up an international circuit for public telephony*, Vol. IV, Rec. M.580.

¹⁾ This Recommendation applies also to 7 kHz and 15 kHz digital sound-programme circuits.