INTERNATIONAL TELECOMMUNICATION UNION

ITU-T N.12

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

MAINTENANCE OF INTERNATIONAL SOUND - PROGRAMME AND TELEVISION TRANSMISSION CIRCUITS

MEASUREMENTS TO BE MADE DURING THE LINE - UP PERIOD THAT PRECEDES A SOUND - PROGRAMME TRANSMISSION

ITU-T Recommendation N.12

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation N.12 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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After the connection of the various circuits to form the international sound-programme link (conforming to the level diagrams of these circuits) it is necessary to verify, by means of an automatic measuring equipment (see Recommendations O.31 [1], O.32 [2] and O.33 [3]) or by measurements at individual frequencies, that the received level at the distant incoming terminal ISPC is at the correct value (see Recommendation N.10) at the following frequencies:

for an international sound-programme link composed entirely of 15-kHz sound-programme circuits	40, 800 and 15 000 Hz
for an international sound-programme link composed entirely of 10-kHz sound-programme circuits	50, 800 and 10 000 Hz
for an international sound-programme link comprising at least one 7 kHz sound-programme circuit	50, 800 and 7 000 Hz
for an international sound-programme link comprising at least one 6.4 kHz sound-programme circuit	50, 800 and 6 400 Hz
for an international sound-programme link comprising at least one 5 kHz sound-programme circuit	100, 800 and 5 000 Hz
for an international sound-programme link comprising at least one ordinary telephone circuit	300, 800 and 3 400 Hz[1)]

The send level during these measurements should be –12 dBm0.

In the case of 15-kHz sound-programme links forming a stereophonic pair, it is necessary to verify the interchannel parameter limits specified in Table 4/N.10.

A measurement of other parameters such as nonlinear distortion and noise should be measured on all links and the results recorded. At the present time the limits cannot be specified.

The national sound-programme circuits should be so adjusted that, when they are connected to the international sound-programme link, the level diagrams of the international sound-programme circuits are respected. In this regard, a useful and quick method which Administrations could use to verify the correct alignment of sound-programme links is given in Annex A of Recommendation N.13.

Any necessary adjustments having been made, the national circuits are connected to the international sound-programme link at the terminal ISPCs. This is the end of the line-up period and the beginning of the preparatory period and is the instant when the complete connection is placed at the disposal of the broadcasting organizations.

The latter then proceed to measure and adjust as necessary.

References

[1] CCITT Recommendation *Automatic measuring equipment for sound-programme circuits*, Vol. IV, Rec. O.31.

[2] CCITT Recommendation *Automatic measuring equipment for stereophonic pairs of sound-programme circuits*, Vol. IV, Rec. O.32.

[3] CCITT Recommendation *Automatic equipment for rapidly measuring stereophonic pairs and monophonic sound-programme circuits, links and connections*, Vol. IV, Rec. O.33.

1) Or the frequency appropriate to the telephone-type circuit used.