



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

M.733

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

**MAINTENANCE:
INTERNATIONAL TELEPHONE CIRCUITS**

**TRANSMISSION ROUTINE MAINTENANCE
MEASUREMENTS ON AUTOMATIC AND
SEMI-AUTOMATIC TELEPHONE CIRCUITS**

ITU-T Recommendation M.733

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.733 was published in Fascicle IV.1 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 M.733

TRANSMISSION ROUTINE MAINTENANCE MEASUREMENTS ON AUTOMATIC AND SEMI-AUTOMATIC TELEPHONE CIRCUITS

The object of routine maintenance measurements is to detect changes in transmission conditions before such changes cause a reduction in the quality of service provided. These changes are those which occur relative to the values recorded for maintenance purposes for the circuits or link concerned. In the various sections of the Series M Recommendations limits are laid down within which:

- no readjustment is necessary,
- readjustment may be made at the terminal stations,
- readjustment must be made along the whole circuit or link.

Routine maintenance measurements should be made according to an agreed maintenance schedule (see Recommendation M.605). The periodicities for the measurements are given in Tables 1/M.610 and 2/M.610. These are to be considered as recommended values and may be increased or reduced if special circumstances require.

Routine maintenance measurements must normally be made at times of light traffic, where staffing arrangements permit. If such measurements have to be made on a large group of circuits, it may nevertheless be necessary to do the measurements on some of the circuits during the busy period, if the operating services are not adversely affected thereby.

Circuits on a given route are generally measured in batches based on the way in which the maintenance schedule has been arranged (see Recommendation M.605). The advantages are:

- once cooperation has been arranged for routine testing with a distant station, time is saved if test cooperation can be maintained for as long as necessary;
- testing a large number of circuits on one route within a fairly short period enables a more accurate overall notion of the route to be obtained than could be gained from measurements on only a few circuits.

Routine maintenance measurements should be made on a complete circuit and should include measurements of overall loss and levels at one and several frequencies, stability (for 2-wire audio circuits only), and noise.