



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

M.450

MAINTENANCE : INTERNATIONAL TRANSMISSION SYSTEMS (ANALOGUE)

BRINGING A NEW INTERNATIONAL TRANSMISSION SYSTEM INTO SERVICE

ITU-T Recommendation M.450

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.450 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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BRINGING A NEW INTERNATIONAL TRANSMISSION SYSTEM INTO SERVICE

1 Preliminary exchange of information

As soon as Administrations have decided to bring a new international transmission system into service, the necessary contacts are made between their technical services¹⁾ for the exchange of information. Those services jointly select the control and sub-control stations for the new system (see Recommendations M.80 and M.90).

The technical service of each Administration is responsible for the setting-up and lining-up of the line sections on its territory and for arranging that the adjustments and tests required are made by the repeater station staff concerned.

To set up a line section which crosses a frontier, Administrations should arrive at bilateral arrangements on the basis of CCITT Recommendations and, for radio-relay sections, the Recommendations of the CCIR.

2 Setting up sections crossing a frontier

2.1 Radio-relay section

Details of the following points will have been settled by a bilateral agreement between the technical services of Administrations:

- geographical position of the radio-relay station nearest to the frontier;
- contour of the terrain of the radio section crossing the frontier, with details of the height of the antennae above normal level;
- directivity characteristic and gain of the antennae;
- radio-frequency channel arrangement (centre frequency, polarization, intermediate frequency);
- provision of supervisory system;
- radio equipment line-regulating pilots (if any);
- continuity pilots, used for supervising the radio-relay link, in accordance with the CCIR Recommendations on the frequency and frequency deviation of this signal, each country transmitting the pilot required by the system in the receiving country;
- noise measurement channels outside the transmitted baseband;
- total noise for the radio-relay section;
- frequency deviation of the telephony channel the level of which at the centre frequency is unaffected by pre-emphasis (either of the telephony channel itself or of the radio-frequency channel of the system);
- pre-emphasis characteristics of the radio-frequency channel;
- service, supervisory and remote channel circuits;
- level, frequency and coding of the signals transmitted over these lines;
- protective switching equipment;
- interconnection points T, R, T', R' (see Figure 1/M.450) defined in Recommendation G.213 [1] (see also [2] and especially the return loss at points R and R' if required (see CCIR Recommendation 380 [3] for values).

¹⁾ The *technical service* represents the appropriate authorities within the international maintenance organization of an Administration which have the responsibility for making international agreements on engineering provision and maintenance matters, specifying provision and maintenance facilities, determining engineering and maintenance policy and overseeing its implementation.