



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

M.490

(11/1988)

SERIES M: GENERAL MAINTENANCE PRINCIPLES

Maintenance of international transmission systems and
telephone circuits – International transmission systems

**EXCHANGE OF INFORMATION FOR PLANNED
OUTAGES OF TRANSMISSION SYSTEMS**

Reedition of CCITT Recommendation M.490 published in
the Blue Book, Fascicle IV.1 (1988)

NOTES

1 CCITT Recommendation M.490 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.

EXCHANGE OF INFORMATION FOR PLANNED OUTAGES OF TRANSMISSION SYSTEMS

1 General

Planned outages of transmission systems are required to allow planned work to be done with the minimum impairment to the service concerned. All tests, measurements, rearrangements, etc., which are not attributed directly to a failure – and are known in advance – are considered to be *planned work*. Such work will include installation of new equipment, routine maintenance, work on power supply equipment and in some cases, work for the clearance of faults which at first could only be remedied provisionally (mainly cable faults).

In the event of planned work which results in the complete or partial interruption in a transmission system, efforts are at first made to reroute the telecommunication traffic as required. If special restoration plans exist for cases of faults, these plans can also be used in the event of planned outages. Should rerouting be impossible, planned work is generally carried out during periods of light traffic, e.g. at night. To allow appropriate measures to be taken, all stations affected by the planned outage must be informed in good time.

2 Planned outages of international groups, supergroups, etc.

When an Administration plans the outage of a transmission system carrying international group/supergroup, etc. links, it should inform all other Administrations in whose territories the links concerned terminate. This information should be given by telex at least three working days in advance.¹ An example is given in Figure 1/M.490. There are cases in which more than three days are necessary, such as those involving extensive rearrangements. If, in exceptional cases, a three-day notice cannot be given, advice should be given by telephone so as to ensure that the Administrations concerned still have sufficient time to take the appropriate steps. Planned outages should not be carried out if notice cannot be given and received at least 24 hours in advance.

In practice, Administrations have entrusted different entities, i.e. either their international centres or their technical services with the exchange of information for planned outages. Therefore, it is essential that each Administration states clearly to whom reports on outages are to be sent². In any case, the technical service of an Administration should be aware of the outages planned in its own country, and try to reduce their impact on international services to a minimum. Passing on of the information within the area of an Administration, e.g. to the control stations for leased and special circuits, or to the users of leased circuits, is done according to the national practice.

3 Planned outages of national transmission systems, which affect international leased and special circuits

In the international centres, international leased and special circuits are frequently through-connected in the voice-frequency band and routed to the destination via national group links. An outage of these group links leads to a break in the international circuit. In these cases, informing the circuit control station and the users is of particular importance in order to avoid unnecessary fault location in the other country.

If an outage is planned for a national system within the area of the Administration being entrusted with the terminal sub-control function for a circuit, the circuit control station should be informed direct or via the two transmission maintenance points (international line) (see Recommendation M.1014 [1] or via the technical service so as to enable the control station to inform the user in good time. In addition, it may be advisable that the terminal sub-control station informs the user at its end of the circuit of the planned outage, since an exchange of information between the users at both ends of the circuit is not always possible. Figure 2/M.490 illustrates the possible flow of information for this case.

A similar procedure should be applied if a planned outage of a national system in a transit country affects an international leased or special circuit.

If an outage is planned for a national system within the area of an Administration having control functions for a circuit, it is recommended that the sub-control station be advised in order to avoid unnecessary queries in the event of a

¹ The time limit of three working days is not intended to affect other agreements in special cases, e.g. a notification time of two weeks in planned outages of submarine cable systems.

² Normally such information is exchanged between the System Availability Information Points (see Recommendation M.721).

fault report being submitted by the user in the distant country concerned. The transmission maintenance point (international line) in its own country should be informed in any case.

from:
to:

because of urgent work in our country the following groups and supergroups will be out of service from 20th march 23.00 to 21st march 06.00 (gmt):

ffm — luxemburg 6003
ffm — paris 6002
ffm — oslo 1202
ffm — rotterdam 6002, 6005
ffm — amsterdam 6002
amsterdam — budapest 1201
ffm — london 1214, 1246
dusseldorf — milano 6001

regards.

FIGURE 1/M.490

Example of a telex message concerning a planned outage of international groups and supergroups

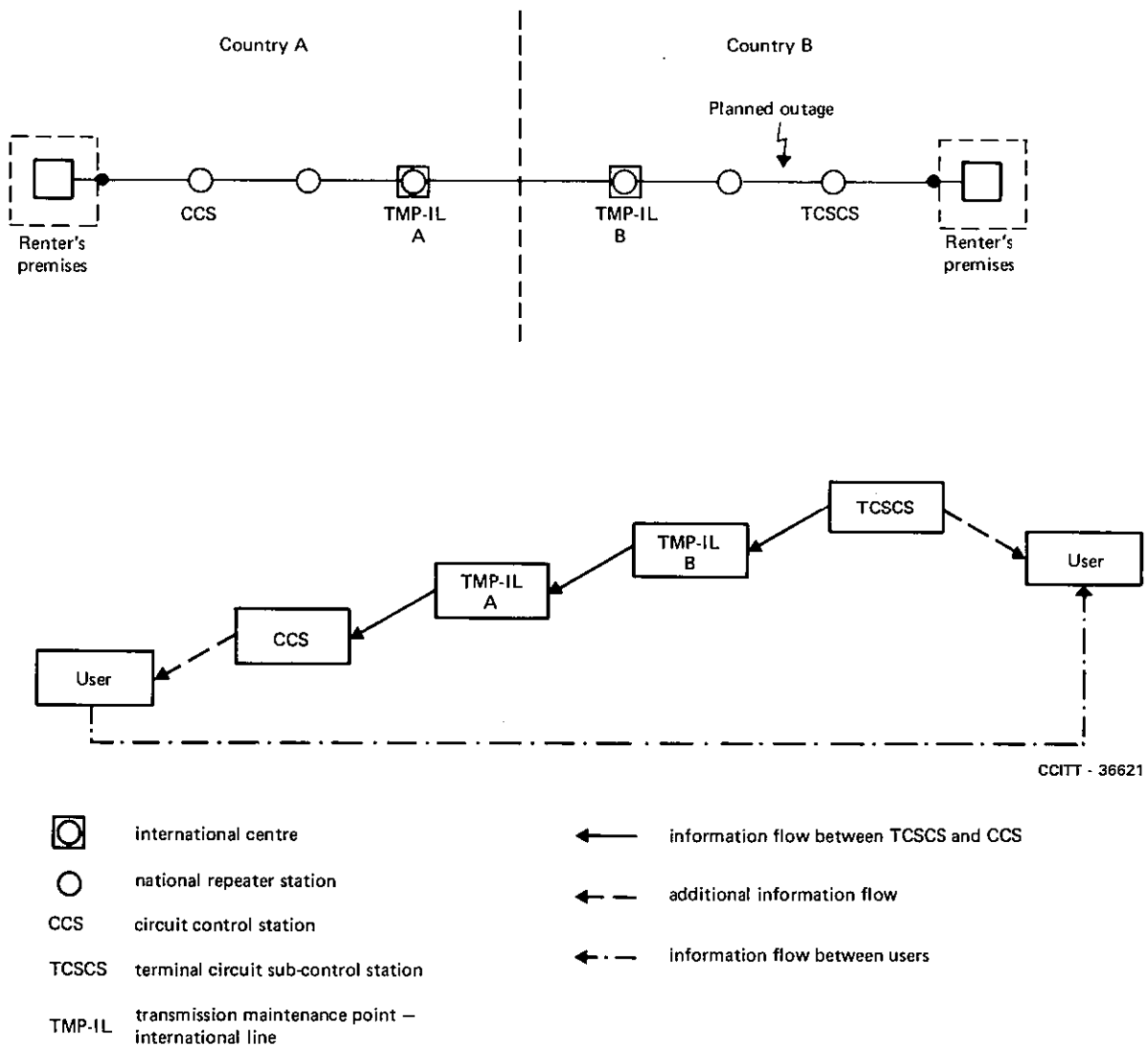


FIGURE 2/M.490

Example of a possible information flow in case of a planned outage of a national transmission system affecting an international leased circuit

Reference

- [1] CCITT Recommendation *Transmission maintenance point international line (TMP-IL)*, Vol. IV, Rec. M.1014.

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