



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

M.605

MAINTENANCE: INTERNATIONAL TELEPHONE CIRCUITS

ROUTINE MAINTENANCE SCHEDULE FOR INTERNATIONAL PUBLIC TELEPHONY CIRCUITS

ITU-T Recommendation M.605

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.605 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.

© ITU 1988, 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

ROUTINE MAINTENANCE SCHEDULE FOR INTERNATIONAL PUBLIC TELEPHONY CIRCUITS

1 General

A schedule for the routine maintenance of the international public telephony circuits linking any two countries (including speech circuits of Signalling System No. 6), is drawn up by bilateral agreement between the technical services¹⁾ of the countries concerned. The programming of the tests to be performed within the agreed scheduled time is the responsibility of each Administration. It is for the circuit control stations to ensure that the routines are carried out within the agreed schedule except as allowed for in § 2.5 below.

2 Routine measurements carried out manually: establishment of the schedule

2.1 Schedule form

Figure 1/M.605 shows the form to be used for establishing the routine schedule; an example of its use is given in Figure 2/M.605.

As far as possible the schedule is drawn up on the principle of batch measurements of circuits on a given route and shows the days and times during which the routine maintenance measurements should be carried out.

Each international test centre will require a set of eight forms to cover the four weeks of the *odd* and the four weeks of the *even* months, four weeks constituting a month for the purpose of the schedule.

Week 1 is the first whole week of a month beginning with a Monday. Week 4 may include days belonging to the following calendar month.

Odd months denotes January, March, May, etc., and *even* months February, April, etc.

The schedule form allows for simultaneous testing on two different routes where two test positions are provided for routine measurements. If more than two routine test positions are available, additional or suitably modified forms will be required.

2.2 Arranging the schedule

The periodicity for circuit routines should be determined from Recommendation M.610.

The total time required to routine test all the circuits on a route should be assessed. It will depend on:

- a) the total number of circuits,
- b) the type of measurements and tests to be made, and
- c) the expected rate of completion of routines for each circuit.

The determination of item c) will require particular care. The duration of circuit routines may be expected to differ from one test centre to another due to the different facilities provided: for example, circuit test access arrangements, and the organization of the work. Thus, no guidance can be given to the expected rate of completion of routines.

To reduce the need to make frequent changes to the schedule, due allowance should be made for any planned increase of the number of circuits on a route.

The individual testing periods may be of 1, 2, 3 or 4 hours duration. Where the total routine time required for a route would make a single testing period impracticable, two or more testing periods should be allocated to the route, but these periods should be separated in time by at least 4 hours.

¹⁾ In some Administrations this function may be delegated by the technical service, but in all cases the technical services are responsible for ensuring the satisfactory preparation and application of the schedule.

The days and times of the testing periods will be decided by a bilateral agreement between the two technical services concerned. To initiate the scheduling of routines for a route, the technical service to which the circuit control station is responsible should request copies of the current schedule form from the distant end technical service. The controlling end technical service should indicate on the forms the day(s) and time(s) it proposes, choosing any unallocated periods on the forms for this purpose. The forms should then be returned to the distant technical service and agreement sought on the proposals²⁾.

It is intended that individual testing periods be allocated to the circuits of one control station only. However, subject to the bilateral agreement between the two technical services involved, individual testing periods may be used on a common basis for the circuits of both control stations.

2.3 *Use of echo canceller devices*

The number of echo cancellation stages and the echo path delay characteristics must be stated in order to program tests properly using the echo canceller test facility as specified in Recommendation O.22 [1]. These characteristics should be included in ATME No. 2 schedule forms when exchanged between Administrations. If ATME No. 2 is not used between Administrations, echo canceller delay information should be conveyed by other means, for example a telex message, or the manual routine testing schedule (Figure 1/M.605).

2.4 *Changes to the schedule*

As far as possible testing periods should be chosen so that new circuits can be incorporated without change to the schedule.

Modifications to the days and/or times of testing for existing circuits, or expansion of the schedule to accommodate additional circuits or new routes should be determined by the technical service to which the circuit control station is responsible, in agreement with the other interested technical service(s). If the technical service responsible for a circuit sub-control station considers it necessary to alter the routine maintenance schedule, it should propose changes and obtain the agreement of the technical service responsible for the control station. Any intended modifications or additions to the schedule should be entered in red on a current copy which should be forwarded to the distant technical service(s) concerned. Agreement or counterproposals can then be made by any suitable means³⁾.

2.5 *Programming of routine measurements and tests*

It is the responsibility of each Administration to decide how the agreed scheduled test periods should be utilized for the effective completion of routines on the circuits it controls.

This will involve determining the type of measurements and tests to be made on each circuit taking into account the recommended periodicities.

2.6 *Unscheduled periods*

Available periods in the schedule which are unallocated may be used for any purpose relating to circuit routines. Such use is on an *ad hoc* basis and each occasion must be agreed by the terminal control and sub-control stations concerned.

3 **Circuit routines by automatic transmission measuring equipment ATME No. 2**

3.1 *Schedule form*

For the orderly and effective use of ATME for circuit routines it is necessary to schedule its use.

For each distant end international centre an Administration will require the following information to enable it to make proposals for ATME routines on the circuits for which it has control responsibility:

- a) type and quantity of responding facilities at distant end;
- b) periods when distant end responding facilities are not scheduled for use;
- c) periods to be avoided due to exchange peak traffic at distant end.

²⁾ In some Administrations this function may be delegated by the technical service, but in all cases the technical services are responsible for ensuring the satisfactory preparation and application of the schedule.

³⁾ In some Administrations this function may be delegated by the technical service, but in all cases the technical services are responsible for ensuring the satisfactory preparation and application of the schedule.