INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.328

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SPECIFICATIONS OF SIGNALLING SYSTEM R1

TESTING ARRANGEMENTS

ROUTING TESTING OF EQUIPMENT (LOCAL MAINTENANCE)

ITU-T Recommendation Q.328

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.328 was published in Fascicle VI.4 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.

4.2 ROUTINE TESTING OF EQUIPMENT (LOCAL MAINTENANCE)

4.2.1 Test equipment for routine testing of individual items of equipment such as circuit equipment, connecting circuits, registers, etc., should be provided in every international exchange. Routine tests should be made in accordance with the practice followed in each country for the local maintenance of switching equipment and may be made with suitable semi-automatic or automatic test equipment if available.

4.2.2 The testing equipment must conform to the following principles:

a) an item of equipment must not be taken for test until it is free;

b) an item of equipment taken for test will be marked engaged (busy) for the duration of the test. Before a circuit equipment is taken for test, the circuit will be withdrawn from service at both international exchanges;

c) as an alternative to *b)*, a like item of equipment, known to be properly adjusted, may be switched in, and the item of equipment to be tested is switched out during the test.

4.2.3 Testing of the circuit and signalling equipment should include a check that the specifications of System R1 are met in regard to the following:

a) *2600 Hz line signalling system:*

- signal frequency;
- transmitted signal levels;
- signal frequency leak;
- receiving equipment operate and non-operate limits;
- receiving-end line split;
- sending-end line split;
- sending duration of signals.

b) *PCM line signalling equipment:*

- receiving equipment operate and non-operate limits;
- sending duration of signals.

c) *Register signalling system:*

- signal frequencies;
- transmitted signal levels;
- signal frequency leak;
- sending duration of signals;
- receiving equipment operate and non-operate limits;
- operation of the receiving equipment in response to a series of pulses;
- error checking features.