

INTERNATIONAL TELECOMMUNICATION UNION



TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU Q.130

SPECIFICATIONS OF SIGNALLING SYSTEM No. 4

SPECIAL ARRANGEMENTS IN CASE OF FAILURES IN THE SEQUENCE OF SIGNALS

ITU-T Recommendation Q.130

(Extract from the Blue Book)

NOTES

1 ITU-T Recommendation Q.130 was published in Fascicle VI.2 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 Q.130

4.7 SPECIAL ARRANGEMENTS IN CASE OF FAILURES IN THE SEQUENCE OF SIGNALS

4.7.1 Blocking an outgoing circuit

Installations should provide the following facilities for blocking outgoing circuits. These facilities will be used or not according to the maintenance instructions which will be promulgated.

- 1) If, after sending a seizing signal, a proceed-to-send signal is not received within 10 to 30 s, the outgoing circuit should be blocked and an alarm given.¹⁾
- 2) The outgoing circuit should be blocked and an alarm given¹) if a proceed-to-send signal or a busy-flash signal is not received within 15 to 30 s of the sending to a transit exchange of the digits necessary to determine the routing.
- 3) If, after sending a clear-forward signal, a release-guard signal is not received within 5 to 10 s, the outgoing end of the circuit should be blocked and an alarm given.¹⁾

At the incoming end of the circuit, the clear-forward signal should be recognized at any time even if the circuit is in the idle state; the incoming line circuit must therefore be able to recognize a clear-forward signal and to return a release-guard signal even of the clear-forward signal has not been preceded by a seizing signal.

4.7.2 Abnormal recognition of a release-guard signal at an international transit exchange

In the case where a release-guard signal is recognized at an international transit exchange without a clear-forward signal having been recognized, arrangements should be made at the transit exchange to:

- send a blocking signal in the backward direction, to busy the outgoing end of the incoming circuit at the transit exchange;
- immediately release the circuit outgoing from the transit exchange.

This prevents the receipt of the release-guard signal from giving a wrong indication that the circuit to the transit exchange is cleared.

¹⁾ The alarm may be immediate or delayed depending upon the desire of the Administration concerned.