



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.12

**GENERAL RECOMMENDATIONS ON TELEPHONE
SWITCHING AND SIGNALLING**

**INTERNATIONAL AUTOMATIC AND
SEMI-AUTOMATIC WORKING**

**OVERFLOW - ALTERNATIVE ROUTING -
REROUTING - AUTOMATIC REPEAT ATTEMPT**

ITU-T Recommendation Q.12

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.12 was published in Fascicle VI.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.

Recommendation Q.12

**OVERFLOW - ALTERNATIVE ROUTING - REROUTING -
AUTOMATIC REPEAT ATTEMPT**

1 When a call cannot find a free circuit in one group of circuits (first choice), technical arrangements can be made to route the call automatically via another group of circuits (second choice), at the same exchange; this process is called *overflow*. There may also be overflow, at the same exchange, from a second choice group of circuits to a third choice group of circuits, etc.

2 When the group of circuits over which the overflow traffic is routed involves at least one exchange not involved in the previous choice route, the process is called *alternative routing*.

3 It should be noted that overflow can occur without alternative routing for cases such as, when there are in one relation two groups of circuits, one group reserved for one-way operation and the other group used for both-way operation. In this case, when all one-way circuits are busy, the call can overflow to the both-way circuit group.

4 When congestion occurs at a transit exchange, arrangements can be made in some signalling systems, at the outgoing international exchange on receipt of a busy-flash signal or a congestion signal sent by the transit exchange, to reroute the call automatically from the outgoing international exchange over another route. This process is called *rerouting*. The use of rerouting is not envisaged in the International Routing Plan.

.....

5 When a difficulty is encountered in the setting-up of a connection - such as double seizure on both-way circuits or error detection - arrangements can be provided to make another attempt to set up the connection for that call from the point where the first attempt took place. This process is called *automatic repeat attempt*.

An automatic repeat attempt may take place:

- on the same circuit; or
- on another circuit of the same group of circuits; or
- on a circuit in another group of circuits.