INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.463

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SPECIFICATIONS OF SIGNALLING SYSTEM R2

SIGNALLING PROCEDURES

SIGNALLING BETWEEN THE OUTGOING INTERNATIONAL R2 REGISTER AND AN INCOMING R2 REGISTER IN A NATIONAL EXCHANGE IN THE DESTINATION COUNTRY

ITU-T Recommendation Q.463

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.463 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.

5.1.3 SIGNALLING BETWEEN THE OUTGOING INTERNATIONAL R2 REGISTER AND AN INCOMING R2 REGISTER IN A NATIONAL EXCHANGE IN THE DESTINATION COUNTRY

5.1.3.1 *Signalling to a national transit exchange*

The outgoing international R2 register sends the requested address digit as the first signal to be received by the incoming R2 register in the national transit exchange in the destination country.

The incoming R2 register examines the digit and if a further digit (or digits) is required for routing, signal A-1 is sent to request the next digit.

When sufficient digits are stored at the incoming exchange to permit the call to be routed to the next exchange the backward signal (if any) is determined by the nature of the signalling system employed on the outgoing link and the national routing principles.

a) If the outgoing national link employs System R2 a backward signal may be sent after the outgoing link is seized to request the address digit required as the first signal to be received by the incoming R2 register in the next exchange. The signalling procedure which occurs is similar to that described in § 5.1.2.2 a) above.

b) If the outgoing link employs System R2 but end-to-end international/national signalling cannot be used, the register in the national exchange relays the interregister signals: it acts as an outgoing R2 register. The digits received by this outgoing R2 register are retransmitted over the outgoing link at the request of the incoming R2 register in the following exchange(s) (see Recommendation Q.478).

c) If the outgoing link employs a signalling system other than System R2 then the acting incoming R2 register is the last incoming R2 register. The exchange seizes an outgoing national link to the next national exchange. Signalling continues between the outgoing international R2 register and the last incoming R2 register and interworking takes place with the other signalling system.

If congestion is encountered signal A-4 is sent (if necessary in pulse form) and the incoming R2 register is released.

On recognition of congestion signal A-4 the outgoing exchange releases the outgoing multi-link section and causes the return of congestion information to the calling subscriber.

5.1.3.2 *Signalling to a national exchange to which the called subscriber is connected*

When the outgoing multi-link section is routed to the national exchange to which the called subscriber is connected the acting incoming R2 register is the last incoming R2 register: the outgoing international R2 register sends the requested address digit as the first signal to be received by the last incoming R2 register and signalling continues as described below.