



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.101

**GENERAL RECOMMENDATIONS ON TELEPHONE
SWITCHING AND SIGNALLING**

**CLAUSES APPLICABLE TO ITU-T STANDARD
SYSTEMS**

**FACILITIES PROVIDED IN INTERNATIONAL
SEMI-AUTOMATIC WORKING**

ITU-T Recommendation Q.101

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.101 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.101

1.1 FACILITIES PROVIDED IN INTERNATIONAL SEMI-AUTOMATIC WORKING

1.1.1 The operating methods used in the semi-automatic international service are described in the *Instructions for the International Telephone Service*. These operating methods assume the existence of equipment (operator's positions and automatic switching equipment) involving the following categories of operators:

- a) *outgoing* operators;
- b) *incoming* operators;
- c) *delay* operators;
- d) *assistance* operators;
- e) *information* or *special service* operators.

1.1.2 The *outgoing operator* controls the setting up of calls at the outgoing exchange. (From the operating point of view she is, in general, the controlling operator and is sometimes so referred to in the *Instructions*.)

She must be able to set up calls to any one of the following points in the called country:

- a) subscribers;
- b) incoming operators at the incoming international exchange;
- c) delay operators, especially a particular delay operator at the incoming international exchange;
- d) incoming operators at a local manual exchange in the called country;
- e) information or special service operators.

The outgoing operator should be able to recall incoming and delay operators on calls set up via these operators, by sending a forward-transfer signal as defined in the relevant system specifications.

1.1.3 The *incoming operator*¹⁾ at the incoming international exchange is obtained by using a special code 11 signal or a special number. The code 11 signal is a particular combination provided by the signal code. This operator performs the functions of an incoming operator in ordinary manual service for those calls which cannot be routed automatically at the incoming international exchange.

1.1.4 The *delay operator* is obtained by using a special code 12 signal, or a special number. The code 12 signal is a particular combination provided by the signal code. The delay operator may be:

- any of the operators of this category;
- or a particular operator, or one of those operating a particular group of positions; her position or her group of positions is then indicated by a number which follows the code 12 signal or is indicated by the special number.

With respect to the direction in which a required call is set up, the delay operator may be at the outgoing international exchange and may be called by an operator at the incoming international exchange. From the technical point of view and as far as signalling is concerned, however, the delay operator at the outgoing international exchange called back by an operator at an incoming international exchange must be regarded as being at the incoming end of the international circuit over which she has been called back.

1.1.5 *Notes on incoming and delay operators*

a) Incoming and delay operators must be able to speak the *service language* used for the route concerned, and hence may have to belong to a particular language group. A *language (or information) digit*, from 1 to 8, sent on all

¹⁾ Called alternatively in French "opératrice translatrice", see *Instructions for the International Telephone Service* (art. 125).

semi-automatic calls, is used to obtain operators of a particular language group [see Recommendation Q.104]²⁾.

- b) It may be the same operator who acts as an incoming and as a delay operator, and even as an assistance operator. She enters a circuit in any of these capacities in response to the appropriate signal.
- c) While an incoming or delay operator is being called, the national ringing tone of the incoming country must be sent back over the international circuit.

1.1.6 The *assistance operator* at the incoming international exchange enters a semi-automatic circuit on a call already set up, when requested by the outgoing operator, because of language difficulties or, for instance, when she is required to interpret a national tone. Access to an assistance operator at an international transit exchange is not possible.

The assistance operator is called by a forward-transfer signal, sent by the outgoing operator when, for example, she operates a key on the outgoing position. An assistance operator in a required language group is obtained in conjunction with the forward-transfer signal by the language digit (or information) sent previously during the setting up of the call. Hence the incoming relay set must store the language digit (or information).

The outgoing operator receives no indication to show that the assistance operator is being called, or to show when she answers or withdraws from the circuit, but if necessary the outgoing operator can send the forward-transfer signal several times on the same call.

The assistance operator must be able:

- a) to break into the call as a third party (this she would do, for example, when the language spoken in the country of arrival is other than the service language used in that relation, and the operator intervenes as an interpreter);
- b) to enter a circuit on one side only after having isolated the other. She does this, in particular, when she translates a verbal announcement or interprets an audible tone returned from the incoming end.

In no circumstances will the assistance operator be able to block the international circuit.

Note - It should be noted that the term "assistance operator" has a very definite meaning in CCITT documents. It stands for an operator who breaks in, as required, as a third party in a circuit already set up. Hence this operator must not be confused with any other operator in the incoming country who may help to *set up* the call in conjunction with the international outgoing operator. Assistance operators may not be available on intraregional circuits.

1.1.7 The *information or special service operator* of the country of destination is obtained by using a special number. This operator is responsible for giving details concerning subscriber number and miscellaneous inquiries.

²⁾ The language digit may not be used on some intraregional circuits.