



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.7

**GENERAL RECOMMENDATIONS ON TELEPHONE
SWITCHING AND SIGNALLING**

**INTERNATIONAL AUTOMATIC AND
SEMI-AUTOMATIC WORKING**

**SIGNALLING SYSTEMS TO BE USED
FOR INTERNATIONAL AUTOMATIC AND
SEMI-AUTOMATIC TELEPHONE WORKING**

ITU-T Recommendation Q.7

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.7 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.

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Recommendation Q.7

SIGNALLING SYSTEMS TO BE USED FOR INTERNATIONAL AUTOMATIC AND SEMI-AUTOMATIC TELEPHONE WORKING

(Geneva, 1954 and 1964, Mar del Plata, 1968,
Geneva, 1976 and 1980)

The CCITT,

considering

(a) that standardization of the signalling systems to be used for international automatic and semiautomatic telephone working is necessary to keep to a minimum the number of different types of equipment serving the various routes at any one exchange;

(b) that the following signalling systems have been standardized and are applicable for *general use* in international automatic and semi-automatic working:

- Signalling System No. 4, standardized by the CCIF in 1954;
- Signalling System No. 5, standardized by the CCITT in 1964;
- Signalling System No. 6, standardized by the CCITT in 1968;
- Signalling System No. 7, standardized by the CCITT in 1980;

(c) that the following signalling systems have been standardized and are applicable for *regional use* in international automatic and semi-automatic telephone working:

- Signalling System R1 (Regional Signalling System No. 1, formerly called the North American System), standardized by the CCITT in 1968;
- Signalling System R2 (Regional Signalling System No. 2, formerly called the MFC Bern System), standardized by the CCITT in 1968;

(d) that, under the conditions and subject to the reservations stated below, these signalling systems may be expected to give acceptable results for international automatic and semi-automatic telephone working;

desiring

that the CCITT Recommendation concerning the signalling systems for international automatic and semi-automatic telephone working be generally applied by all Administrations;

unanimously recommends

that, under the conditions and subject to the reservations stated below, Administrations should use, for international automatic and semi-automatic telephone working, one or more of the standard signalling systems mentioned in (b) and (c) above.

1 Criteria for selecting a signalling system

Many factors influence the selection of a given signalling system for a particular application. Factors that should be considered include:

1.1 Satellite systems because of long round-trip propagation delays (540 ± 40 ms)

The inclusion of one satellite link in a telephone connection requires subscribers to keep more discipline than usual during a conversation. If use is made of two satellite links in tandem, requirements are even more stringent. In addition, there is the question of what transmission objectives are attainable on such a connection.