INTERNATIONAL TELECOMMUNICATION UNION

ITU-T U.60

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

TELEGRAPH SWITCHING

RADIOTELEX INTERWORKING

GENERAL REQUIREMENTS TO BE MET IN INTERFACING THE INTERNATIONAL TELEX NETWORK WITH THE MARITIME SATELLITE SYSTEMS

ITU-T Recommendation U.60

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation U.60 was published in Fascicle VII.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.

Recommendation U.60

GENERAL REQUIREMENTS TO BE MET IN INTERFACING THE INTERNATIONAL TELEX NETWORK WITH MARITIME SATELLITE SYSTEMS

(Geneva, 1980; amended at Malaga-Torremolinos, 1984)

The CCITT

considering

(a) that, with fully automatic working between subscribers in the international telex service, it is desirable that the interface between the international telex network and maritime satellite systems be defined;

(b) that the CCIR is charged with the task of making Recommendations relating to the radio path of maritime satellite systems;

(c) that explanation of the detail of the interface between the international telex network and maritime satellite systems would be of assistance to the CCIR;

(d) that Recommendation U.61 specifies the detailed interface requirements,

unanimously recommends

(1) that maritime satellite systems should be capable of interfacing the international telex network with one or more signalling systems in accordance with:

- Recommendation U.1: Signalling conditions to be applied in the international telex service (type A and type B signalling);
- Recommendation U.11: Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling);
- Recommendation U.12: Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling);

(2) that type D signalling (Recommendation U.12) and, as a second choice, type C signalling (Recommendation U.11) are the preferred signalling systems, when they are available within the national boundaries, for the reasons given in Annex A;

(3) that as the maritime signalling from the ship to the coast earth station is in the same relationship as the connection from the subscriber to the originating exchange in the international network, it is necessary that the transit delays inherent in the maritime system should be considered in conjunction with the standards recommended for the international network;

(4) that the access of ship earth stations to store-and-forward units, if provided, should be in accordance with the relevant Series F and U Recommendations on international store-and-forward units.

ANNEX A

(to Recommendation U.60)

Signalling systems types C and D

A.1 These signalling systems have been developed in CCITT to permit the maximum utilization of the international telex network as well as to simplify the interface problems that exist between Administrations using different signalling systems within their national boundaries. In particular, types C and D signalling systems, which use telex destination codes in accordance with Recommendation F.69 [1], are of assistance in solving the problems of routing to and from maritime satellite systems where multiple access techniques are employed.

A.2 Type C signalling (Recommendation U.11) facilitates the use of improved techniques for switching traffic in the international network. In particular:

(a) it permits any telegraph circuit capable of carrying International Telegraph Alphabet No. 2 (ITA 2) to be used without the need to convert supervisory signals to a form capable of being carried by the circuit;

(b) it permits the automatic testing of the ability of the international circuit to transmit teleprinter characters before the call is established to the distance subscriber;

(c) it permits the detection of head-on collision of calls and thus permits service protocols to be established in handling such collisions. It may be noted that head-on collisions may occur on telegraph circuits that are operated in the bothway mode due to the fact that the calling signal takes a finite time, depending upon the nature of the transmission path, before the receiving end of the circuit detects the seizure from the outgoing end;

(d) it permits the efficient use of the international network with particular reference to the most economical use of automatic alternative routing and, by providing transit centre identification, permits full flexibility in routing as well as international accounting and subscriber billing.

A.3 Type D signalling (Recommendation U.12) facilitates the introduction into the international network of the following facilities (in addition to the advantages mentioned in § A.2 above):

(a) user groups;

(b) network identification signals;

(c) identification of the calling station without the necessity of using the WRU signal;

(d) identification of a call relating to service matters, which the international network carries as a non-chargeable call.

Reference

[1] CCITT Recommendation *Plan for telex destination codes*, Rec. F.69.