



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**R.59**

**TELEGRAPHY**

**TELEGRAPH TRANSMISSION**

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**INTERFACE REQUIREMENTS FOR 50-BAUD  
START - STOP TELEGRAPH TRANSMISSION  
IN THE MARITIME MOBILE SATELLITE  
SERVICE**

**ITU-T Recommendation R.59**

(Extract from the *Blue Book*)

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## NOTES

1 ITU-T Recommendation R.59 was published in Fascicle VII.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 R.59**

**INTERFACE REQUIREMENTS FOR 50-BAUD START-STOP TELEGRAPH  
TRANSMISSION IN THE MARITIME MOBILE SATELLITE SERVICE**

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

The CCITT,

*considering*

- (a) that proper interworking with the international telegraph services must be ensured;
- (b) that the coast-earth station equipment will interface with the international terrestrial telegraph networks and will therefore need to conform to CCITT Recommendations where applicable;
- (c) that the ship earth station will include a local end with its termination consisting of start-stop equipment using International Telegraph Alphabet No. 2;
- (d) that corresponding requirements are given in CCIR Recommendation 553,

*unanimously recommends*

- (1) that the coast earth station equipment interfacing with terrestrial telegraph channels should conform to Recommendation R.101 as applicable to 50-baud services:
  - a) for signals from the terrestrial network entering the coast earth station, the relevant points are given in Table 1/R.59;
  - b) for signals from the coast earth station entering the terrestrial network, the relevant points are given in Table 2/R.59;
- (2) that the transmission characteristics of the ship earth station start-stop equipment should conform to Recommendation S.3 as applicable to 50-baud services,

TABLE 1/R.59

Parameter	Recommendation R.101
Input modulation rate	§ 2.1
Isolated character stop elements	§ 2.2
Minimum interval between start elements	§ 2.3
No restrictions on the use of combinations of International Telegraph Alphabet No. 2	§ 2.4
Effective net margin	§ 2.5
Minimum input start element duration	§ 2.6

TABLE 2/R.59

Parameter	Recommendation R.101
Output distortion	§ 3.1
Output modulation rate	§ 3.2
Minimum output stop element	§ 3.3

*considering further*

(e) that in the first generation INMARSAT system, telex characters are transmitted in synchronous channels using 6-unit frames in such a way that, due to speed differences between the on-board teleprinter and the satellite telex channel, periods of Z polarity equal to the duration of a telex character occasionally appear in the data stream;

(f) that this may cause difficulties when the ship earth station is operating towards automatic terminals, store-and-forward units. etc. in the international telex network,

*recommends*

(3) that, if practicable, future systems should be designed so that insertion of unnecessary periods of Z polarity is avoided when characters are to be retransmitted at cadence speed into the international telex network.