



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**R.50**

**TELEGRAPHY**

**TELEGRAPH TRANSMISSION**

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**TOLERABLE LIMITS FOR THE DEGREE  
OF ISOCHRONOUS DISTORTION OF  
CODE - INDEPENDENT 50-BAUD TELEGRAPH  
CIRCUITS**

**ITU-T Recommendation R.50**

(Extract from the *Blue Book*)

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## NOTES

1 ITU-T Recommendation R.50 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.50**

### **TOLERABLE LIMITS FOR THE DEGREE OF ISOCHRONOUS DISTORTION OF CODE-INDEPENDENT 50-BAUD TELEGRAPH CIRCUITS**

*(former CCIT Recommendation B.24, Arnhem, 1953; amended at Geneva, 1976 and 1980)*

The CCITT,

*considering*

(a) that, to facilitate the study of plans for the establishment of international telegraph circuits, it is convenient to set limits for the degree of isochronous distortion of the telegraph circuits and channels;

(b) that, for whatever purpose normally used, these circuits should be capable of use with start-stop equipment;

(c) that, in certain cases, limits have been set by Recommendations R.57 and R.58 for the isochronous distortions of the trunk sections of circuits and for that of voice-frequency telegraph channels;

(d) that the limits laid down are those that should be evident in service conditions on telegraph circuits, excluding the local lines and terminal equipment,

*unanimously declares the view*

(1) that circuits (excluding local lines and terminal equipment) should be established and maintained in such a manner that the degree of isochronous distortion will not exceed 28% whether they are equipped with regenerative repeaters or not;

(2) that the degree of isochronous distortion of each channel that may form part of a circuit should be as small as possible, and should not in any case exceed 10 %.