



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.50 bis

PUBLIC DATA NETWORKS

TRANSMISSION, SIGNALLING AND SWITCHING

**FUNDAMENTAL PARAMETERS OF A 48-kbit/s
USER DATA SIGNALLING RATE
TRANSMISSION SCHEME FOR THE
INTERNATIONAL INTERFACE BETWEEN
SYNCHRONOUS DATA NETWORKS**

ITU-T Recommendation *X.50 bis*

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation X.50 *bis* was published in Fascicle VIII.3 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.

**FUNDAMENTAL PARAMETERS OF A 48-kbit/s USER DATA SIGNALLING
RATE TRANSMISSION SCHEME FOR THE INTERNATIONAL INTERFACE
BETWEEN SYNCHRONOUS DATA NETWORKS**

(Geneva, 1980)

1 General

1.1 This Recommendation sets out the fundamental parameters of a transmission scheme that should be used for 48-kbit/s data signalling rate for interworking of networks that make use of the following structures:

- a) 8-bit envelope (see Explanatory Notes 1 and 2 of Recommendation X.50);
- b) 10-bit envelope (see Explanatory Note 3 of Recommendation X.50); in the case where at least one of the networks is structured according to a).

1.2 For interworking between two networks both of which utilize the 10-bit envelope structure as identified in § 1.1 b) above, Recommendation X.51 *bis* will apply.

1.3 Paragraph 2 of this Recommendation deals with the basic parameters which shall be used in any application of this Recommendation and, in particular, for interworking between two networks, both of which utilize the 8-bit envelope structure.

1.4 Paragraph 3 of this Recommendation, in addition to § 2, applies to the interworking of networks with different envelope structures.

1.5 The use of the status bit, in addition to the indication given in this Recommendation, should comply with Recommendation X.21 and X.21 *bis*, together with Recommendation X.71 for connections using decentralized signalling and with Recommendation X.60 for connections using common channel signalling.

2 Transmission scheme

2.1 The gross bit rate of 64 kbit/s should be standardized for international links.

2.2 The signal element of the 64-kbit/s channel should be assembled in 8-bit envelopes in which bit 1 is the F bit, bits 2-7 are information bits and bit 8 is the status bit S.

2.3 The use and the value to be assigned to the F bits of the 8-bit envelopes are under study.

3 Interworking of networks with different envelope structures

The problem of interworking of networks with different envelope structures should be further studied taking into account the recommendations in § 4 of Recommendation X.50.