INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

I.414

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(03/93)

INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

ISDN USER-NETWORK INTERFACES

OVERVIEW OF RECOMMENDATIONS ON LAYER 1 FOR ISDN AND B-ISDN CUSTOMER ACCESSES

ITU-T Recommendation I.414

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation I.414 was prepared by the ITU-T Study Group XVIII (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

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 I.414

OVERVIEW OF RECOMMENDATIONS ON LAYER 1 FOR ISDN AND B-ISDN CUSTOMER ACCESSES

(Helsinki, 1993)

1 Scope

This Recommendation describes the configurations of ISDN and B-ISDN customer accesses, and lists the relevant Recommendations on layer 1.

2 ISDN customer access

Figure 1 shows overview of Recommendation on layer 1 for ISDN customer access. Relevant Recommendations are given in Table 1. Terms and abbreviations used in this Recommendation and the listed Recommendations are defined in the Recommendations I.112 and G.701. Requirements for V-reference points are defined in Recommendation Q.512.

The access arrangements shown in Figure 1 are not intended to be either exhaustive or mandatory. Other Recommendations also affecting layer 1 aspects (e.g. protection against overvoltages, EMC requirements, etc.) are referred to at the appropriate sections of these Recommendations.

3 B-ISDN customer access

Figure 2 shows overview of Recommendations on layer 1 for B-ISDN customer access. Relevant Recommendations are given in Table 2. Terms and abbreviations used in this Recommendation and the listed Recommendations are defined in Recommendation I.113.

The access arrangements shown in Figure 2 are not intended to be either exhaustive or mandatory. Other Recommendations also affecting layer 1 aspects are referred to at the appropriate sections of these Recommendations.

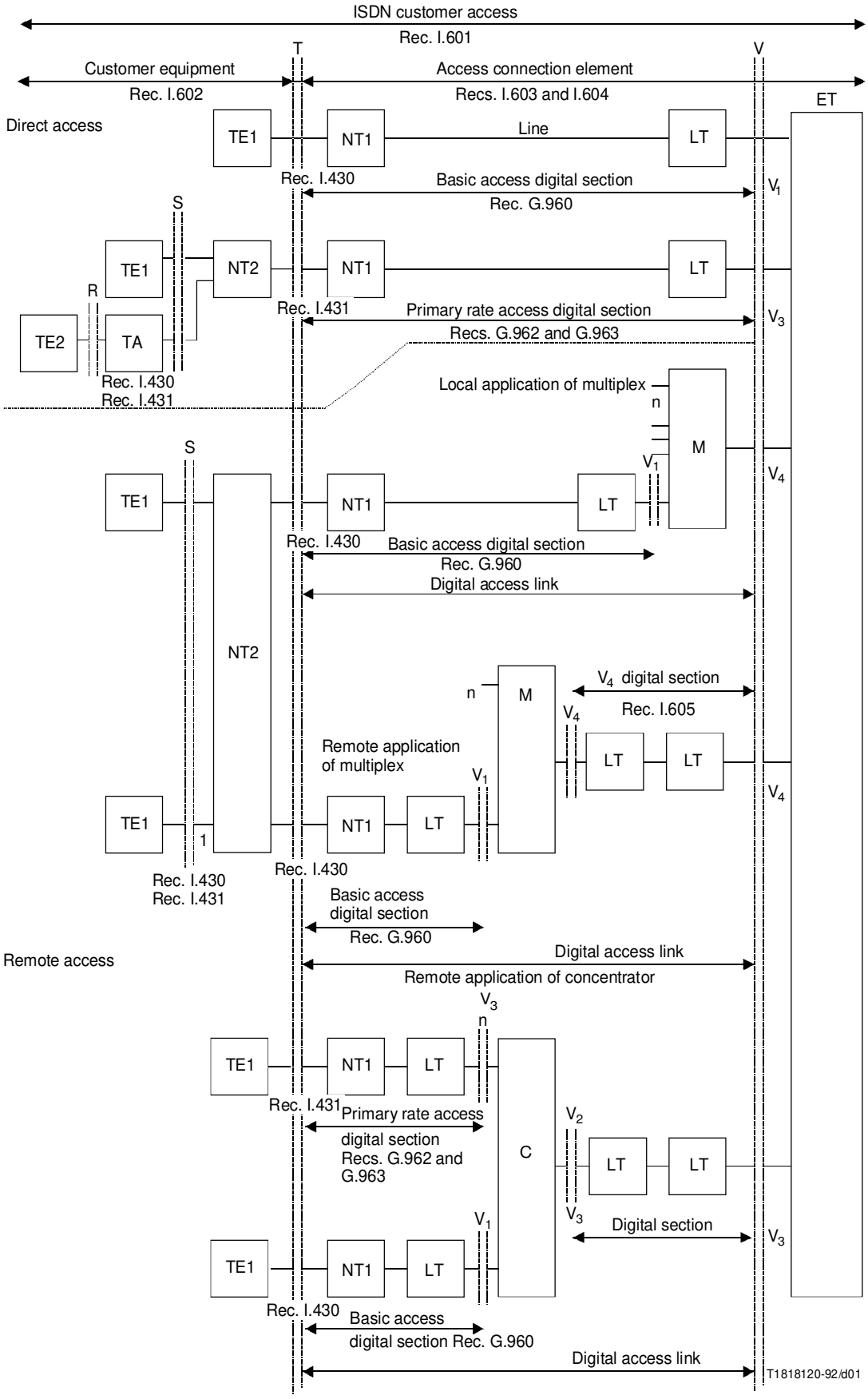


FIGURE 1/I.414

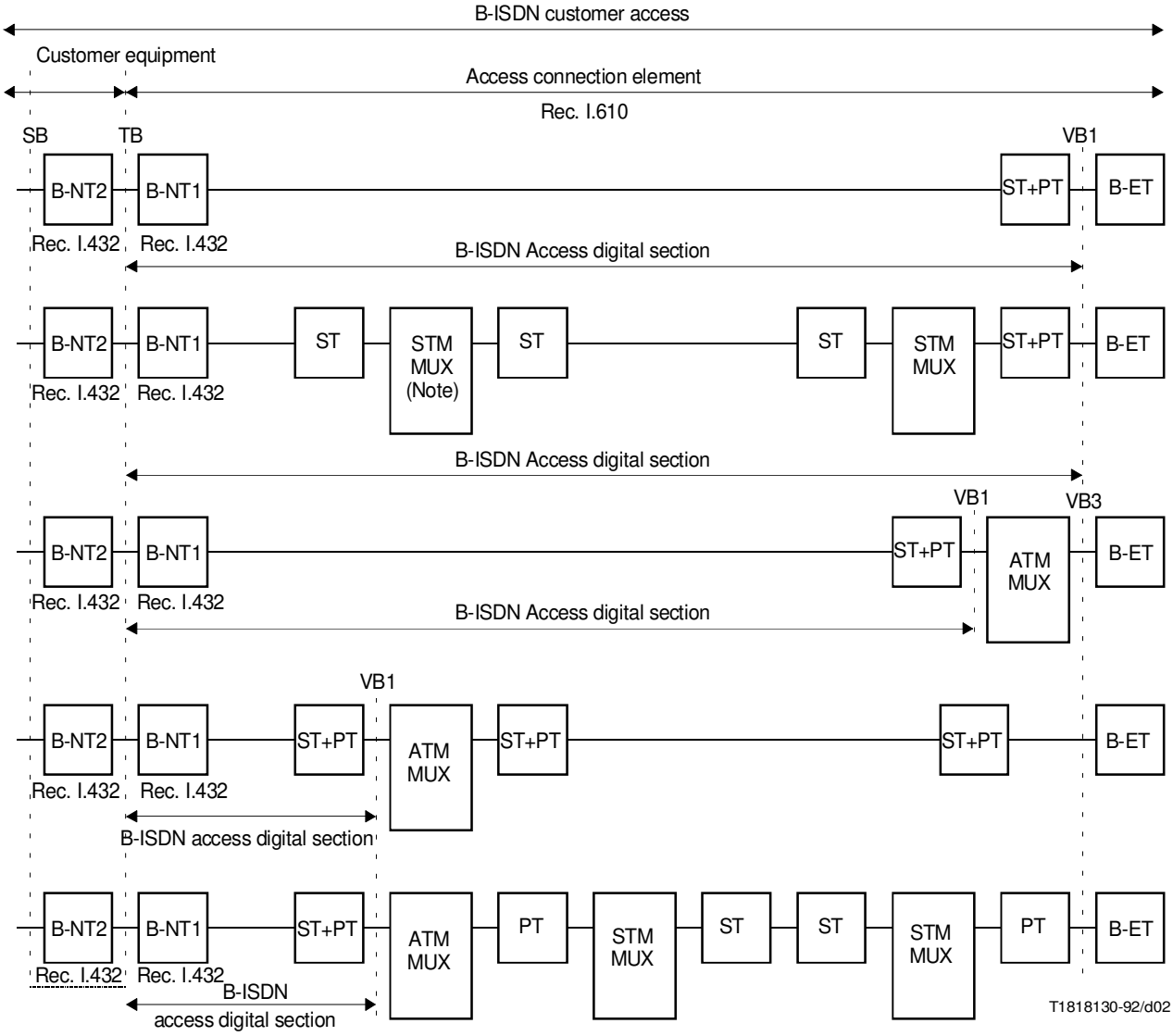
Overview of Recommendations on layer 1 for ISDN customer access

TABLE 1/I.414

Recommendations on layer 1 for ISDN customer access

	User network interface		Access digital section (media independent)	Digital transmission system (media dependent)		Maintenance principles
	Medium	Recommendation		Medium	Recommendation	
Basic rate access	Metallic pair	I.430	G.960	Metallic pair	G.961	I.603
Primary rate access	Metallic pair	I.431	G.962 G.963	(Note)		I.604

NOTE – Not yet defined.



NOTE – In the case of double routing, the access digital section has to be terminated at the STM MUX.

FIGURE 2/I.414

Overview of Recommendations on layer 1 for B-ISDN customer access

TABLE 2/I.414

Recommendations on layer 1 for B-ISDN customer access

<table>
<tr><td colspan="2">User network interface</td><td>Access digital section (media independent)</td><td colspan="2">Digital transmission system (media dependent)</td><td>Maintenance principles</td></tr>
<tr><td>Medium</td><td>Recommendation</td><td>Draft Recommendation</td><td>Medium</td><td colspan="2">Recommendation</td></tr>
<tr><td>Coaxial cable</td><td rowspan="2">I.432</td><td rowspan="2">(G.96x)</td><td colspan="2" rowspan="2">(Note)</td><td rowspan="2">I.610</td></tr>
<tr><td>Optical fibre</td></tr>
<tr><td colspan="6">NOTE – Not yet defined.</td></tr>
</table>