



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

R.114

(11/1988)

SERIES R: TELEGRAPH TRANSMISSION

Time division multiplexing

NUMBERING OF INTERNATIONAL TDM CHANNELS

Reedition of CCITT Recommendation R.114 published in
the Blue Book, Fascicle VII.1 (1988)

NOTES

- 1 CCITT Recommendation R.114 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.114

NUMBERING OF INTERNATIONAL TDM CHANNELS

(Malaga-Torremolinos, 1984; amended at Melbourne, 1988)

The CCITT,

considering

(a) that in view of the introduction in the international service of time division multiplex (TDM) channels with different characteristics, configured for various nominal modulation rates and for different character structures, it has become necessary to evolve a method of numbering TDM channels;

(b) that this numbering method must make it possible to recognize:

- the type of TDM (code-dependent or code-independent);
- the nominal modulation rate and (in the case of code-dependent TDM) the character length;
- the position of the channel in the frame,

unanimously declares the view

1 The channels in an international TDM system conforming to Recommendation R.101 should be numbered as shown in Table 1/R.114.

2 The number assigned to a channel should be selected from the series applicable to the type of channel and should correspond to its position in the multiplex tables in Recommendation R.101.

3 The channels in an international TDM system conforming to Table 1/R.111 should be numbered as shown in Table 2/R.114.

4 The channels in systems conforming to Table 1/R.111 should be numbered in the same way as their positions in the frame; i.e. in the sequence from 1 to 255 excluding the channel numbers that are multiples of 16. In establishing a channel having a rate of more than 50 bauds, the number assigned coincides with the number of the first 50 baud channel taking part in the integration.

5 International TDM channels to Recommendation R.112 should have the numbering scheme shown in Table 3/R.114.

6 The numbers assigned to the channels should be selected from the series applicable to the type of channel and should correspond to its position in the Figure 1/R.112 to Recommendation R.112.

7 International code independent and code dependent channels to Recommendation R.102 should have the numbering schemes shown in Tables 3/R.114 and 4/R.114, respectively.

8 The numbers assigned to the channels should be selected from the series applicable to the type of channel and should correspond to its position in Tables 2/R.102 to 4/R.102 to Recommendation R.102.

9 Channel numbering of 50 baud channels for branch-line muldexes conforming to Recommendation R.103 should be in accordance with the numbering scheme in Tables 1/R.114 and 4/R.114.

TABLE 1/R.114

Numbering scheme for TDM systems conforming to Recommendation R.101

Nominal modulation rate (bauds)	Channel numbers
50	0501 - 0546
75	0701 - 0742 (for alternative A). See Table 3/R.101 for numbers not used 0701 - 0731 (for alternative B, 0716 not used)
100	1001 - 1023 (for 10 unit, 1008 not used) 1701 - 1723 (for 7½ unit, 1708 not used)
110	1101 - 1123 (1108 not used)
134.5	1301 - 1315
150	1501 - 1515
200	2001 - 2011 (for 10 unit, 2008 not used) 2101 - 2111 (for 11 unit, 2108 not used) 2701 - 2711 (for 7½ unit, 2708 not used)
300	3001 - 3007 (for 10 unit) 3101 - 3107 (for 11 unit)

TABLE 2/R.114

Numbering scheme for TDM systems conforming to Table 1/R.111

Nominal modulation rate (bauds)	Maximum distortion (%)	Channel numbers
50	5	5001 - 5255 (The numbers 16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224 and 240 are not used)
100	5	6001 - 6127 (The numbers 16, 32, 48, 64, 80, 96 and 112 are not used)
200 (300)	5 (7.5)	7001 - 7063 (The numbers 16, 32 and 48 are not used)
600	7.5	8001 - 8031 (The number 16 is not used)
1200	7.5	8101 - 8115

TABLE 3/R.114

**Numbering scheme of code independent channels for TDM systems
conforming to Recommendations R.112 and R.102**

Nominal modulation rate (bauds)	Maximum degree of isochronous distortion due to sampling (%)	Channel numbers	
		R.112 (2400 bit/s)	R.102 (4800 bit/s)
50	8.3	5801 - 5815	5801 - 5831 (5816 not used)
100	8.3	6801 - 6807	6801 - 6815
200	8.3	7801 - 7803	7801 - 7807

TABLE 4/R.114

**Numbering scheme of code dependent channels for TDM systems
conforming to Recommendation R.102**

Nominal modulation rate (bauds)	Channel numbers
50	0501 - 0592
75	0701 - 0746
100	1001 - 1046 (for 10 unit) 1701 - 1746 (for 7.5 unit)
110	1101 - 1146
134.5	1301 - 1331 (1316 not used)
150	1501 - 1531 (1516 not used)
200	2001 - 2023 (for 10 unit, 2008 not used) 2101 - 2123 (for 11 unit, 2108 not used) 2701 - 2723 (for 7.5 unit, 2708 not used)
300	3001 - 3015 (for 10 unit) 3101 - 3115 (for 11 unit)

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