



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

X.54

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

PUBLIC DATA NETWORKS

TRANSMISSION, SIGNALLING AND SWITCHING

**ALLOCATION OF CHANNELS ON
INTERNATIONAL MULTIPLEX LINKS
AT 64 kbit/s**

ITU-T Recommendation X.54

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation X.54 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.

Recommendation X.54

ALLOCATION OF CHANNELS ON INTERNATIONAL MULTIPLEX LINKS AT 64 kbit/s

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

The CCITT,

considering that

Recommendations X.50 and X.51 define multiplexing schemes for international links at 64 kbit/s,

unanimously declares

the following view on the allocation of the tributary channels.

On international links carrying data channels multiplexed at 64 kbit/s according to Recommendations X.50 and X.51, the allocation of tributary channels at rates of 0.6, 2.4, 4.8 and 9.6 kbit/s within the multiplex frame, should be chosen, by bilateral agreement, among the configurations listed in Table 1/X.54.

Note 1 - If, on bilateral agreement, a single 48 kbit/s channel is transmitted, optionally permissible within an X.51 multiplex frame, this configuration is numbered 00.

Note 2 - The phase number i ($i = 1, \dots, 5$) corresponds to the set of envelopes $i + 5j$ ($j = 0, \dots, 15$ for 80 envelope frames; $j = 0, \dots, 3$ for 20 envelope frames) of each frame. Each phase contains either one 9.6-kbit/s or two 4.8-kbit/s or four 2.4-kbit/s or sixteen 0.6-kbit/s channels.

TABLE 1/X.54
**Allocation of tributary channels
in the 64-kbit/s multiplex frame**

Configuration number	Phase number				
	1	2	3	4	5
00	48				
01	9.6	9.6	9.6	9.6	9.6
02	9.6	9.6	9.6	9.6	4.8
03	9.6	9.6	9.6	9.6	2.4
04	9.6	9.6	9.6	9.6	0.6
05	9.6	9.6	9.6	4.8	4.8
06	9.6	9.6	9.6	4.8	2.4
07	9.6	9.6	9.6	4.8	0.6
08	9.6	9.6	9.6	2.4	2.4
09	9.6	9.6	9.6	2.4	0.6
10	9.6	9.6	9.6	0.6	0.6
11	9.6	9.6	4.8	4.8	4.8
12	9.6	9.6	4.8	4.8	2.4
13	9.6	9.6	4.8	4.8	0.6
14	9.6	9.6	4.8	2.4	2.4
15	9.6	9.6	4.8	2.4	0.6
16	9.6	9.6	4.8	0.6	0.6
17	9.6	9.6	2.4	2.4	2.4
18	9.6	9.6	2.4	2.4	0.6
19	9.6	9.6	2.4	0.6	0.6
20	9.6	9.6	0.6	0.6	0.6
21	9.6	4.8	4.8	4.8	4.8
22	9.6	4.8	4.8	4.8	2.4
23	9.6	4.8	4.8	4.8	0.6
24	9.6	4.8	4.8	2.4	2.4
25	9.6	4.8	4.8	2.4	0.6
26	9.6	4.8	4.8	0.6	0.6
27	9.6	4.8	2.4	2.4	2.4
28	9.6	4.8	2.4	2.4	0.6
29	9.6	4.8	2.4	0.6	0.6
30	9.6	4.8	0.6	0.6	0.6
31	9.6	2.4	2.4	2.4	2.4
32	9.6	2.4	2.4	2.4	0.6
33	9.6	2.4	2.4	0.6	0.6
34	9.6	2.4	0.6	0.6	0.6
35	9.6	0.6	0.6	0.6	0.6
36	4.8	4.8	4.8	4.8	4.8
37	4.8	4.8	4.8	4.8	2.4
38	4.8	4.8	4.8	4.8	0.6
39	4.8	4.8	4.8	2.4	2.4
40	4.8	4.8	4.8	2.4	0.6
41	4.8	4.8	4.8	0.6	0.6
42	4.8	4.8	2.4	2.4	2.4
43	4.8	4.8	2.4	2.4	0.6
44	4.8	4.8	2.4	0.6	0.6
45	4.8	4.8	0.6	0.6	0.6
46	4.8	2.4	2.4	2.4	2.4
47	4.8	2.4	2.4	2.4	0.6
48	4.8	2.4	2.4	0.6	0.6
49	4.8	2.4	0.6	0.6	0.6
50	4.8	0.6	0.6	0.6	0.6
51	2.4	2.4	2.4	2.4	2.4
52	2.4	2.4	2.4	2.4	0.6
53	2.4	2.4	2.4	0.6	0.6
54	2.4	2.4	0.6	0.6	0.6
55	2.4	0.6	0.6	0.6	0.6
56	0.6	0.6	0.6	0.6	0.6