

Tele

No. J-16018(1)/87-WF
Government of India
Ministry of Communications
Department of Telecommunications
(W.P.C.WING)

Sardar Patel Bhay
Parliament Street
New Delhi-110001
Dated: 6.10.89.

To
The Director,
Railway Board,
Ministry of Railways,
Rail Bhavan, New Delhi-1.
(Attn: Sh. Roshan Lal, Director)

Sub: - Revised UHF channelling plan.

Sir,

SAB

I am directed to refer to your letter No. 82/W3(Tele)/WCM/5 dtd. 1.9.89 and to enclose herewith the channelling plan for the frequency band 437-445MHz and 462-470MHz adopted for the following channels.

- (1) 24 & 60 Channels-Analogue System.
- (2) 30 Channels-Digital System.

Yours faithfully,

Encl - As Above

(DR. S.N. SHARMA)
ENG INEER
FOR ASSTT. WIRELESS ADVISER
TO THE GOVERNMENT OF INDIA

in case of...

*18/10 162
17/10/89*

*Shri. T.N.
19/10*

*copy
17/5/94
TU/Haw/ERL*

Forwarded to RLB vide 82/W3 Tele/WCM/5 dt. 15/11/89

ER's no. Cab/CSTB/285/16/A PF-III

dt 8/12/89.

TECHNICAL SPECIFICATIONS IN THE FREQUENCY BANDS
437-445MHZ AND 462-470MHZ FOR DIGITAL SYSTEM.

1. No. of channels : 30
2. Adjacent channel separation. : 3 MHz
3. IF frequency : 35/70 MHz.
4. Trans to Receive Separation : 25 MHz
5. Maximum Transmitter power: output : 5 watt.
6. Frequency Stability : \pm 20 ppm.
7. Spurious level : 60 db below carrier as per Radio Regulations.
8. No. of possible RF Channels:
in each band : 2 (Two)

FREQUENCY PLAN:

1. 440 MHz : 1'465 MHz
2. 443 MHz : 2'468 MHz

J.S.

TECHNICAL SPECIFICATIONS IN THE FREQUENCY BANDS 437-445 MHz AND 462-470 MHz.

1.	No. of Voice Channels	24	60
2.	Baseband Freq. range	12-108KHz	60-300 KHz
3.	Loading level(-144logN)	4.52 db	6.1 db
4.	Multichannel peak factor	13 db	13 db
5.	Multichannel RMS to Peak	17.52 db	19.1 db
6.	Per Channel RMS deviation	35 KHz	100 KHz
7.	Multichannel Peak deviation	$\pm(262.5 + \frac{100}{100})$ KHz	$\pm(900 + \frac{300}{100})$ KHz
8.	Adjacent Channel separation	1.2 MHz	3 MHz
9.	IF Frequency	35 MHz/ 21.4 MHz/ 10.7 MHz	35 MHz/21.4 MHz/ 10.7 MHz
10.	TX-RX Separation	25 MHz	25 MHz
11.	RF Power Output	10 Watts (Max)	10 watts(Max.)
12.	Freq. Stability	± 20 ppm	± 20 ppm
13.	No. of possible RF Channels in each band	6	2

FREQUENCY PLAN IN THE BAND 437-445 MHz and 462-470 MHz(1 + 4) Channel

1.	437.6 MHz	1'. 462.6 MHz
2.	438.2 "	2'. 463.2 "
3.	438.8 "	3'. 463.8 "
4.	439.4 "	4'. 464.4 "
5.	440.0 "	5'. 465.0 "
6.	440.6 "	6'. 465.6 "
7.	441.2 "	7'. 466.2 "
8.	441.8 "	8'. 466.8 "
9.	442.4 "	9'. 467.4 "
10.	443.0 "	10'. 468.0 "
11.	443.6 "	11'. 468.6 "
12.	444.2 "	12'. 469.2 "

24 Channels (FDM)

1.	438.2 MHz	1'. 463.2 MHz
2.	439.4 "	2'. 464.4 "
3.	440.6 "	3'. 465.6 "
4.	441.8 " .	4'. 466.8 "
5.	443.0 "	5'. 468.0 "
6.	444.2 "	6'. 469.2 "

60 Channels (FDM)

1.	440.0 MHz	1'. 465.0 MHz
2.	443.0 MHz	2'. 468.0 MHz

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