Government of India Ministry of Communications Department of Telecommunications Wireless Planning & Coordination Wing

> 6th Floor, Sanchar Bhawan, 20, Ashoka Road, New Delhi 110001

Subject: Minutes of 2nd meeting of Working Group-2 (1 to 6 GHz) of NFAP review/ revision

Kindly refer to the 2nd meeting of Working Group-2 (1 to 6 GHz) of NFAP review/ revision committee held under the chairmanship of Sh. N K Bhola, Joint Wireless Adviser to the Govt. of India, WPC Wing was held on 11.09.2024, and find enclosed the Minutes of Meeting for reference and further action please.

Enclosure: As above.

-04/10/2024 -

(Davender Singh Rawat) Engineer, WPC Wing

To,

- 1. All Stakeholders
- 2. Sr. DWA (ISR) for information
- 3. Director (IT) for uploading in DoT website

Minutes of 2nd meeting of Working Group-2 (1 to 6 GHz) of NFAP review/ revision

Second meeting of Working Group-2 (WG-2) to review/ revise National Frequency Allocation Plan (NFAP) 2022 under the chairmanship of Sh. N K Bhola, Joint Wireless Adviser to the Govt. of India, WPC Wing was held on 11.09.2024 in hybrid mode at Sanchar Bhawan, New Delhi. Stakeholders from various Government Departments, Telecom Service Providers, Manufactures, Academia, Associations etc. participated in the meeting.

2. In his opening address, the Chairman welcomed all participants. List of participants is enclosed at Annexure-I.

3. Davender Singh Rawat, Engineer, WPC Wing introduced the draft NFAP document (1 to 6 GHz) where changes in the Allocation Table and RR footnotes were made as per ITU-RR 2024. Sachin Kumar, AWA, WPC Wing explained the changes proposed in the draft.

4. Stakeholders were requested to present their contributions.

4.1 Contribution from AAI (Modification in IND 27):

4.1.1 AAI introduced their document on 2700-2900 MHz band and stated that this band is exclusively allocated for aeronautical radionavigation service on Primary basis and being used for Primary Approach Radar (PAR). These radars fall under critical systems for safety of life services as well as for defence purposes. AAI proposes to rescind IND 27 from the NFAP that allows Microwave Multipoint Distribution System (MMDS), including broadband applications in this band.

4.1.2 IAFI in their contribution i.r.o. 2700-2900 MHz band stated that places where AAI is not operating in the band, broadband application may co-exist. Hence, they proposed to modify IND 27 footnote by accommodating Fixed Wireless Access also, in this band. AAI stated that Airports are expanding exponentially and this band may not be used for any other purpose than aeronautical radionavigation service. To the advice of Sh. M K Pattanaik, JWA, WPC Wing, AAI agreed to submit their proposal with respect to the future expansion program of Airports and introduction of new technologies etc.

4.1.3 TCL supported IAFI contribution to use Enterprise application in 2700-2900 MHz band in coordination with AAI.

4.1.4 Sachin Kumar, AWA, WPC Wing informed the floor that matter on usage of 2700-2900 MHz band for FWA, Enterprise application is already under-examination in WPC Wing, even before start of this reviewing activity of NFAP. The case, being the policy matter, requires decision of the Government. He requested stakeholders to submit technical studies and international references of deployment in this band in support of their proposal to WPC Wing.

4.2 Contribution from DCPW:

4.2.1 No representative from DCPW was present. Sachin Kumar, AWA, WPC Wing introduced the contribution. Document indicated to protect FSS provided by Polnet 2.0 network used by State/ UTs Police/ CAPFs/ CPOs. It also proposes that

dedicated police band may also be defined in relevant IND footnotes. Representative from RJIL informed that WPC had already advised to put bandpass filters to avoid receiving any interference from adjacent band. Sachin Kumar, AWA, WPC Wing further added that NFAP is a public document and therefore, no reference to frequency band used by defence/ security agencies be made in it. However, being a licensed user, frequency bands used by security agencies will be protected.

4.3 Contribution from IAFI:

4.3.1 **Addition of IND 28A:** 1st contribution is based on usage of FWA PTP application with higher EIRP in 5150-5250 MHz & 5725-5875 MHz band which is similar to contribution submitted by TCL in 1st meeting of Working Group-2 (WG-2). It has been clarified to stakeholders that any change in parameters of delicensed band may not be in scope of this Working Group. However, since representative from IAFI was not available at that time, TCL was requested to submit details of proposed usage, use-cases, and also the limitation of current delicensed parameters.

4.3.2 **Modification of IND 27:** 2nd contribution was already discussed in Para 4.1.2 above.

4.3.3 **Modification of IND 16:** 3rd contribution is a common document shared among all Working Groups (WG-1 to 3). It has been proposed to add 5.388A to IND 16 Footnote. The same has been noted by WPC Wing.

4.4 Contribution from Mt. Abu Intl. HAM Radio Club (MHRC):

4.4.1 MHRC introduced their document on 1245-1300 MHz band. They stated that Amateur is allocated as Secondary service in this band and requires coordination from Primary service. MHRC proposed to issue frequency assignment for Amateur service on non-interference basis. Further, they requested for review of the circular issued by WPC for Amateur bands as per latest ITU-RR. Sachin Kumar, AWA, WPC Wing informed the floor that this band is being used by DoS and Defence for strategic purposes. MHRC may submit their technical study/ international references to concerned group of WPC Wing for frequency assignment of what they have been asking for.

4.5 Contribution from Viasat (Modification of IND 16):

4.5.1 Viasat introduced their document on 1518-1559 MHz band that stated that it is used in MSS to provide communications for the GMDSS and needs to be protected. Sachin Kumar, AWA, WPC Wing informed that proposed protection is already mentioned in Resolutions 212 (Rev.WRC-23) and 225 (Rev.WRC-23).

4.6 Contribution from GMRT (Modification of IND 13):

4.6.1 GMRT proposed to modify IND 13 by adding name of the village "Khordad" where their Radio astronomy facility is located in Pune. Secondly, they proposed to consistently include IND 13 in the Frequency Allocation Table for which it is applicable.

5. Yogesh Nandwani, Engineer, WMS Bhopal categorized all the contributions received, so far, as per proposed IND footnotes in a document and presented it.

6. The meeting concluded with thanks to the Chair and all the participants/ stakeholders.

Place: New Delhi Date: 04.10.2024

Annexure-I

S. No.	Name	Organization
1	N K Bhola	Chairman, WPC Wing
2	M K Pattanaik	WPC Wing
3	Sachin Kumar	WPC Wing
4	Mohit Saxena	WPC Wing
5	Davender Singh Rawat	WPC Wing
6	Yogesh Nandwani	WMO
7	Antrix Gupta	WPC Wing
8	Dimple Singh	WPC Wing
9	Vikas Jakkar	JCES
10	Rajiv Kumar	Doordarshan
11	R R Prasad	BECIL, MIB
12	Sofi	DOS
13	Divya Oberoi	GMRT-NCRA
14	Ankur	GMRT-NCRA
15	Umesh	AAI
16	Dr. Atul Kumar	IIT-BHU
17	Bimal Chopra	Reliance Jio Infocomm Ltd (RJIL)
18	Dr. Shruti	Dhruva Space
19	Bharat Bhatia	ITU-APT Foundation of India (IAFI)
20	Munesh Gaur	Tata Communications Ltd. (TCL)
21	Mehul Bhandari	Viasat
22	Ashwani Kumar	Nokia
23	Suresh Kumar Karthikeyan	Susan Future Technologies
24	Yashwant Patil	Mt. Abu Intl. HAM Radio Club (MHRC)
25	Anurag	
26	Dr. Paul Ravindran	
27	Harish	
28	Kalaivanan K	
29	Kantha Shree	
30	Krishna	
31	Poonam Singh	
32	Rajiv Kattar	
33	Richa Chakravarty	
34	Soumava Mukherjee	
35	Swadesh De	
36	Upena Dalal	

List of Participants