

Immediate

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

Dated: 23.07.2024

Subject: Minutes of the first meeting of Working Group (WG) 1 (upto 1 GHz) of NFAP – 2022 Review/ Revision

Kindly refer to the first meeting of **Working Group (WG) 1 (upto 1 GHz) of NFAP – 2022 Review/ Revision** Committee which was held under the chairmanship of Shri.Viresh Goel, Jt. Wireless Advisor to the Govt. of India on 09.07.2024 and find enclosed the minutes of the meeting for reference and further necessary action please.



(Preetam Meena)

Engineer (WPC Wing)

Tel No. 9868049160

Encl: As above

To,

1. All stakeholders
2. Sr.DWA (ISR), WPC wing for information pls.
3. Director (IT), DoT, Sanchar Bhawan with a request to upload in DoT website.

Dated: 23.07.2024

Subject: Minutes of the 1st meeting of Working Group (WG) 1 (upto 1 GHz) of NFAP – 2022-Review/ Revision

First meeting of Working Group-1 of NFAP Review/ Revision Committee was held in virtual mode on 09th July 2024 during 1130 -1230 hours, under the chairmanship of Sh. Viresh Goel, Joint Wireless Adviser to the Govt. of India. Stakeholders from Government as well as private organization including startups, academia participated in the meeting. Agenda of the meeting is enclosed as ***Annexure-I***.

2. The meeting started with a welcome note and introductory remarks by the Chairman. Chairman of Working Group-1 provided brief of the responsibilities assigned to this working group. He also briefed about the discussions held in the recently held NFAP review committee's meeting for better clarity and ease of processing of the input contributions. It was informed that amendments in NFAP-2022 would be taking into account the decisions and outcomes of WRC)-23, national requirements and technological advancements. The inputs from the stakeholders regarding specific allocations or footnotes in NFAP will be deliberated and considered however, specific inputs related to the delicensing of frequency bands is not within the scope of the WG-1.

3. After that participants were requested to introduce themselves. The meeting had very diverse participation from Industry, Academia, representatives from WPC Wing, DoT and various other government organizations such as JCES, MIB, Airport Authority of India etc. and list of participants is enclosed as ***Annexure- II***.

4. An overview of the decisions taken at WRC-2023 was presented by Sh. Vishal Singh Yadav, Deputy Director. It was pointed out that WRC-2023 has considered various Agenda Items (AIs) during its meeting held

in November- December 2023 out of which decisions taken in respect of 06 AIs (AI 1.4, 1.5, 1.7, 1.8, 1.11 and 1.12) are relevant for WG-1. A brief of these 06 AIs was provided to apprise the participants of the outcomes. The format for receiving input contributions from various stakeholders (**enclosed in Annexure-III**) was also discussed.

5. Four (04) no. of contributions were received from three (03) stakeholders on this subject prior to this meeting, which were presented by the concerned stakeholders. The input contributions received are placed at website <https://dot.gov.in/spectrum> in “NFAP-2025”.

6. The contributions were introduced and presented by the respective stakeholders.

6.1 M/s Susan Future Technologies Private Limited representative introduced their first contribution on identification of complete band 698-960 MHz for High Altitude Platform Station as IMT Base Station (HIBS) in accordance with the RESOLUTION 213 (WRC-23).

6.2 M/s Susan Future Technologies Private Limited representative introduced second contribution on setting up a pan-India integrated Broadband PPDR (BB-PPDR) Communication Network in the frequency band 814-824/859-869 MHz (Paired). Some of the stakeholders commented upon regarding a portion of the band is used by PMRTS; requirements of PPDR etc.

6.3 M/s Tata Communications limited representative presented their contribution regarding frequency band 918-922 MHz for LPWAN requirement may be made available. During the discussions, it was informed that delicensing related issues may not be under the purview of WG-1 and the proponent may approach the WPC Wing in this respect.

6.4 M/s Shure Audio Technologies Private Limited representative presented a contribution for Frequency band 470-694 MHz for Programme Making and Special Events (PMSE) applications. It was also informed that the contribution is not for delicensing of the band but for identification of the band for PMSE.

7. Subsequently, it was also discussed that channelling Plan in VHF or other frequency bands, as applicable, shall be included in revised NFAP. In this regard Chairman WG-1 informed that as per discussions in the meeting chaired by Wireless Adviser, Channelling Plan in respective bands may be included in the upcoming NFAP. In addition, the Chairman requested the stakeholders to submit the Channelling plans for deliberations in the subsequent meetings.

8. In the end Chairman, WG-1 requested stakeholders to provide their written comments, counter-comments in respect of the various input along with necessary justification, so that they may be discussed during subsequent meetings. Stakeholders were again invited to provide contributions.

9. The meeting ended with the vote of thanks to the Chairman.

Enclosure: Annexure-I, II, III

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Agenda for the 1st Meeting (09 July 2024, 11:30 Hrs, Virtual)

1. Welcome and Introductory remarks;
2. Opening Remarks by the Chairman
3. Introductions by Attendees and WG 1 members
4. Brief on decision of WRC 2023 (limited upto 1 GHz)
5. Introduction of Contributions by stakeholders
6. Any other business

Annexure-II

List of Participants

SL.No	Name	Organisation
1	Abhijit Panicker	COAI
2	Aditya Trivedi	-
3	Akshay Mishra	DSP Works
4	Anil Tanden	-
5	Annu Ahlawat	WMO
6	Anurag Gupta	C-DOT
7	Anuresh Sharma	-
8	Arun Kumar,	WPC Wing
9	Ashish Garg	(GSMA) Mobile
10	Ashok Kumar Bahal	-
11	Ashwini V N	Harman International Pvt Ltd
12	Atul Jain	Broadband India Forum
13	AVS RAO.	Aryaomnitalk HO
14	Bhoomika Gaur,	TEC
15	BIMAL CHOPRA	RJIL
16	Chandra Murthy	IISc
17	Davender	WPC Wing
18	Debashish Bhattacharya	Broadband India Forum
19	Dilip Srivastava	Doordarshan
20	Divya Oberoi	NCRA/GMRT
21	Dr. Lalita Gupta	MANIT Mobile
22	Dr. Rakesh Kumar	-
23	Dr. S. Khatua	SMPS ELECTRIC
24	Kantha Shree	-
25	Khagendra Singh,	WPC Wing
26	Kumar Appaiah	IIT Bombay
27	MPS Alawa	WPC Wing
28	Mrunmaya Kumar Pattanaik	WPC Wing
29	Munish Gaur	Tata Communications
30	Murali Medudula	RJIL
31	Mohit Saxena	WPC Wing
32	Ashwani Kumar	Nokia
33	Pankaj Ghosh	TCL
34	Paresh Shetty	-
35	Poonam Singh	-
36	Prateek Srivastava	WPC Wing
37	Prof Vijaya kumar	HP
38	Punit Rathod	Qualcomm

39	RK NAGAICH	WMO
40	Rajeev Dwivedi	JCES
41	Rajesh Rana	SHURE
42	Rajith Ali	SIA-India
43	Swati Rawat	RJIL
44	Sanjay Sahay	-
45	Shalini	WPC Wing
46	Suresh Kumar	Susan Future Technologies
47	Uma	Whitewater Solutions
48	AAI/ Umesh Kumar	Airport Authority of India
49	VK Roy	DDG Radio, TEC
50	VENKATA RATNAM DEVANABOYINA	-
51	VINIT	-
52	Viresh Goel	Chairman, WPC Wing
53	Vishal Singh Yadav	WMO
54	Yogesh Nandawani	-
55	Preetam Meena	WPC Wing

BRIEF ON WRC – 2023 DECISIONS (LIMITED UPTO 1 GHz)

WRC 2023 has considered 19 agenda items (agenda items 1.1 to 1.19), 4 issues (agenda item 9.1) pertaining to report of Director, Radiocommunication Bureau (BR) and 9 standing agenda items (agenda items 2 to 10) w.r.t. Revision in Radio Regulation 2020. Among the different agenda items, there are 6 AI which are related to Working Group 1 of NFAP as detailed below:

SR No.	AGENDA ITEM NO.	AGENDA	DECISION
1.	1.4	Use of HIBS for IMT base stations which works in different bands below 2.7 GHz.	The frequency band 698-960 MHz, or portions thereof, in Region 2, and the frequency band 694-960 MHz, or portions thereof, in Region 1, and some country in Region 3 including INDIA (the frequency bands 703-733 MHz, 758-788 MHz, 890-915 MHz and 935-960 MHz, or portions thereof,) are identified for use by high-altitude platform stations as International Mobile Telecommunications (IMT) base stations (HIBS). This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations.

2.	1.5	To review the spectrum needs of existing services in the band 470-960 MHz in the Region 1.	The frequency band 470 -960 MHz or part thereof is identified for IMT usage in many countries subject to agreement obtained under No. 9.21 . For the protection of the broadcasting service, stations in the mobile service shall not create a field strength for more than 1% of the time at the highest of the clutter height or 10 m above ground level at the border of the territory of any other administration that exceeds the field strength value as calculated using § 4.1.3.2 of Annex 2 to the GE06 Agreement with regard to allowance for multiple interference, Table AP1.10 and the methodology given in the GE06 Agreement. These limits may be exceeded on the territory of any country whose administration has so agreed. This allocation shall in no way adversely affect the broadcast development or undermine new entries of the broadcast service to the GE06 Plan.
3.	1.7	New Aeronautical Mobile Satellite service allocation in the 117-975-137 MHz.	The use of the frequency band 117.975-137 MHz by the aeronautical mobile-satellite (R) service is subject to coordination under No. 9.11A. No. 9.16 does not apply. Such use shall be limited to non-geostationary-satellite systems operated in accordance with international aeronautical standards.

4.	1.8	The introduction of digital safety application in the AMS in the HF band based on ITU studies.	APPENDIX 27 * Frequency allotment Plan for the aeronautical mobile (R) service and related information is updated
5.	1.11	Modernisation of GMDSS and introduction of e-navigation.	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the maritime mobile service and the mobile-satellite (Earth-to-space) service is limited to the automatic identification system (AIS), including AIS search and rescue transmitters (AIS-SART) and satellite emergency position indicating radio beacons with AIS (EPIRB-AIS). The use of these frequency bands by the aeronautical mobile (OR) service is limited to AIS emissions from search and rescue aircraft operations. The AIS, AIS-SART and EPIRB-AIS operations in these frequency bands shall not constrain the development and use of the fixed and mobile services operating in the adjacent frequency bands.
6.	1.12	New secondary allocation for EESS (Active) for space bone radar sounder, around 45 MHz frequency.	The use of the frequency band 40 -50 MHz by the EESS (active) shall be in accordance with the geographical area