

Government of India
Ministry of Communications
Department of Telecommunications
Wireless Planning and Coordination Wing
International Spectrum Regulation Group

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

No. T-11012/03/2024-ISR

Date: 12.08.2024

Subject: Minutes of the Second Meeting of NFAP-2022 Review/ Revision Committee

The second meeting of NFAP 2022 Review/ Revision Committee was held in hybrid mode on 02nd August 2024, under the chairmanship of Wireless Adviser, WPC Wing in the Spectrum Room, 6th Floor, Sanchar Bhawan. Stakeholders from Government, academia, and private organization including startups participated in the meeting. List of participants is enclosed as **Annexure-I**.

2. The meeting commenced with opening remarks from the Chairman. The Chairman apprised the participants that this meeting would review the progress of the work of Working Groups (WGs) of the NFAP Review/Revision Committee and would discuss issues, if any. He emphasized the need to complete the NFAP Review/Revision according to the established timeline.
3. The WG Chairs were then invited to present report on their activities. WG Chairs briefed the meeting on proposals received by their WGs for addition/ modification to IND footnotes and the discussions held regarding these proposals. WGs reports are enclosed as **Annexure II, III & IV**. The same can also be accessed at <https://dot.gov.in/spectrum-management/3351> .
4. The Chairman appreciated the progress made by the WGs and encouraged them to continue their efforts to ensure the timely completion of the NFAP 2022 Review/Revision. He noted that some inputs on de-licensing frequency bands had been received and were being considered informally by the WGs. The Chairman advised the participants to avoid discussing the de-licensing of frequency bands, as decided in the first meeting of the NFAP 2022 Review/Revision Committee, and to focus on NFAP issues where convergence can be achieved.
5. The meeting ended with vote of thanks to the Chairman.

Enclosure: Annexure-I, II, III & IV

(-Sd/-)

(Arun Kumar)
Assistant Wireless Adviser to the Govt. of India
WPC Wing

Physical Participants					
Sr. No.	Name	Designation	Organizaion	Email-Id	Mobile No.
1	Mr V.J. Christopher	Wireless Advisor	WPC Wing	wawpc@nic.in	9910030730
2	Mr Gulab Chand, JWA	JWA	WPC Wing	gulab.chand@nic.in	9013136180
3	Ms M. Revathi, JWA	JWA	WPC Wing	m.revathi@nic.in	9868135689
4	Mr M.K. Pattanaik, Sr. DWA	Sr. DWA	WPC Wing	pattanaik.mr@gov.in	9013132768
5	Mr Amit Gulati	Sr. DWA	WPC Wing	amit.gulati@nic.in	9868804459
6	Dr. PSM Tripathi	Sr. DWA	WPC Wing	psm.tripathi@nic.in	9862097014
6	Mr T. Srinivasa Rao	DWA	WPC Wing	sr.tummuri@gov.in	9440000734
7	Mr Arvind Mrinu	AWA	WPC Wing	arvind.mrinu@gov.in	8583919968
8	Mr Arun Kumar	AWA	WPC Wing	angurana.arun@nic.in	9599768850
9	Mr Sachin Kumar	AWA	WPC Wing	sachin.kumar46@gov.in	9560062988
10	Mr Ashish Garg	Lead Spectrum	GSMA	ararg@gsma.com	9654431039
11	Mr Bharat Bhatia	President	IAFI	bharat.bhatia@iafi.in	9810173737
12	Mr Suresh Madan	Director	Ceama/ Ahuja	smadan@ahujaradio.com	9810200642
13	Mr Suman Thakur	Head-TAE	Sennheiser	suman.thakur@sennheiser.com	9810677332
14	Mr Rahul Dubey	Manager	Lekha Wireless solution	rahulkumar.d@lekhawireless.com	9310056111
15	Mr Rajeev Kumar	Director (Engg.)	Doordarshan	rajeev00kumar@prasarbharati.gov.in	9868366232
16	Mr Bimal Chopra	DVP	RJIL	bimal.chopra@ril.com	9971524477
17	Mr Murali Medudula	AGM	RJIL	murali.medudula@ril.com	9971524477
18	Mr Aashish Kumar	Head spectrum Stdz And 6G	Indian Space Association	aashish@ispa.space	8285154399
19	Mr Manish Saur	General Manager	Tata comm	munish.gaur@tatacommunications.com	9654990362
20	Mr Satyam Kushwaha	Wing Commander	ISpA	satyam.dir.ispa@gmail.com	9910031966
21	Mr Rahul Mahna	Deputy Secretaey	MoD	dsgs3-mod@gov.in	9818512336
22	Mr Vikram Tiwathia	DDG	COAI	ddg@coai.in	8860035959
23	Maj Rajeev Dwivedi	Maj	JCES	sac.church@nic.in	9101241287
24	Mr Deepak Mishra	WG Cdr	JCES		
25	Ms Swati Rawat	Ast Manager	RJIL	swati.s.rawat@ril.com	9910777282

Remote Participants					
Sr. No.	Name	Designation	Organizaion	Email-Id	Mobile No.
1	Mr N K Bhola	JWA	WPC Wing		
2	Mr Viresh Goel	JWA	WPC Wing		
3	Mr Munesh Kumar	JWA	WPC Wing		
4	Mr MPS Alawa	Sr DWA	WPC Wing		
5	Mr. LD Meghwal	Sr. DD	WMO		
6	Mr Preetam Meena	Engineer	WPC Wing		
7	Mr Abhishek Kumar	Engineer	WMO		
8	Ms Leela Kumari	Engineer	WMO		
9	Mr Raju Dey	Engineer	WMO		
10	Ms Shalini Gupta	Engineer	WPC Wing		
11	Mr Shivam Srivastav	Engineer	WMO		
12	Ms Priti	Engineer	WMO		
13	Mr A S Yadav		AAI		
14	Mr Umesh Kumar		AAI		
15	Mr Abhijit Panicker		COAI		
16	Mr Alka Asthana		Tata communication ltd		
17	MR. Anil Tandan		BIF		
18	Mr. Ankit Adjariya	Assitant Director	DCPW		
19	Mr. Ankur		GMRT		
20	Mr. Anuresh Sharma				
21	Mr. Ashok Kumar Bahal				
22	Mr. AVS Rao		Arya omnitalk		
23	Mr. Debashish Bhattacharya		BIF		
24	Ms Depali Sharma		MIB		
25	Dr N S Rajput		IIT(BHU)		

26	Dr Aditi Sharma			
27	Dr. Atul Kumar			
28	Mr H Rayappa		SATCOM-PO, DoS	
29	Mr Harish			
30	Mr. Jishnu		Tejas Networks	
31	Mr. Jitendra		Qualcomm	
32	Mr Junaid		Apple	
33	Ms Kantha Shree		C-PRAV	
34	Mr Manoj Kotti			
35	Mr Mehul Bhandari		Viasat	
36	Mr MJ			
37	Mr Ashwani Kumar		Nokia	
38	Mr Om Jee		IIT(BHU)	
39	Mr Prabhat Thakur		SIT-Pune	
40	Mr Pravin Raybole		GMRT	
41	Mr Punit Rathod		Qualcomm	
42	Mr Rajesh Rana		Shure Audio Tech.	
43	Mr Rajiv Khattar		Intelsat	
44	Mr Sanjeev Sharma			
45	Mr Santosh Kumar Singh	ADAW	DGCA	
46	Mr Santosh Singh		DGCA	
47	Mr Saurabh Mittal		Airtel	
48	Mr Sendil Kumar		Ericsson	
49	Ms Sofi		ISRO	
50	Mr Suresh Kumar Karthikeyan		Susan Future Tech.	
51	Mr Suresh Warriar		Elena Geo	
52	Mr Uttam Poddar	ADAW	IT Tripura	
53	Mr Vikram Tiwathia		COAI	
54	Mr vinay		DCPW	
55	Mr Vinay Srivastava		RJIL	
56	Mr Vipin Malhotra			
57	Mr Atul Jain			
58	Mr Ashok Kumar Bahal			
59	Mr Yogendra Trihan		MIB	

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

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

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

Immediate

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

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

Kindly refer to the 1st meeting of Working Group 2 (1 to 6 GHz) of NFAP 2022 review/revision committee held under the chairmanship of Sh. N.K. Bhola, Joint Wireless Adviser, WPC Wing on 19.07.2024 and find enclosed Minutes of Meeting for reference and further action please.


(Davender Singh Rawat)
Engineer, WPC Wing

Enclosed: As Above

To,

1. All Stakeholders
2. Sr. DWA (ISR) for information pls.
3. Director (IT), DoT for uploading on DoT Website

**Minutes of 1st meeting of Working Group 2 (1 to 6 GHz) of NFAP
review/revision committee**

First meeting of **Working Group-2** to review/revise the National Frequency Allocation Plan (NFAP) – 2022, taking into consideration the decisions of World Radiocommunication Conference WRC-2023, national requirements and latest developments in the radiocommunication technologies etc., under the chairmanship of Sh. N K Bhola, Joint Wireless Adviser to the Govt. of India, WPC Wing was held **on 19.07.2024** through video conferencing. Stakeholders from various Government departments, Telecom Service Providers, Manufactures, Academia, Associations etc. participated in the meeting. List of participants is enclosed at **Annexure**.

2. At the outset of the meeting, Chairman welcomed all stakeholders, outlined the committee's objectives and emphasized the importance of incorporating WRC-2023 decisions and national requirements while reviewing/ revising NFAP-2022.

3. All the stakeholders were requested to give their introduction. After the introduction of stakeholders, Sh. Sachin Kumar, Assistant Wireless Adviser, WPC Wing presented the key decisions of WRC 2023 relevant to frequencies between 1 to 6 GHz.

4. Three (03) stakeholders submitted their contributions, prior to meeting, which were presented by the concerned stakeholders. The input contributions received are placed at website <https://dot.gov.in/spectrum> in “NFAP-2025”.

4.1 M/s Tata Communications Limited (TCL) introduced their 1st contribution on administratively allocation of 2.7-2.9 GHz band for Fixed Wireless Access. Sh. Chander Murthy, IISc proposed that this band can be used for captive networks in educational campuses. AAI and Defence/ JCES /DNS opposed the proposal i.r.o. 2.7-2.9 GHz band, being earmarked for aeronautical radionavigation services in RR.

4.2 M/s Tata Communications Limited (TCL) introduced their other two proposals i.r.o. allocating 3.7-3.8 GHz, 3.8-4.2 GHz and 4.8-4.99 GHz for CNPN. JCES opposed the proposal to put additional allocation in 3.7- 4.2 GHz band and further emphasized that in the last meeting of WPC Wing 4940-4990 MHz for CNPN and rest of band to be used for existing services. DCPW also opposed the proposal because of the usage of POLNET in this band.

4.3 M/s Tata Communications Limited (TCL) introduced their 4th contribution on allocation of 5.150-5.250 GHz and 5.725-5.875 GHz for Fixed Wireless Access.

4.4 M/s Tata Communications Limited (TCL) introduced their 5th contribution on delicensing of 5.925-7.125 GHz for Fixed Wireless applications.

4.5 Sh. Bharat Bhatia from ITU-APT Foundation of India discussed the IND footnotes requiring attention for the review/ revision of NFAP 2022.

4.6 M/s Susan Future Technologies Private Limited introduced their contribution on identification of 1710-1980 MHz, 2010-2025 MHz, 2110-2170 MHz and 2500-2655 MHz for High Altitude Platform Station as IMT Base Station (HIBS) in accordance with the RESOLUTION 221 (REV.WRC-23) and RESOLUTION 218 (WRC-23).

4.7 M/s RJIL representative requested to take proposals only on WRC decisions, as discussed in the 1st meeting of NFAP review/revision committee.

5. Stakeholders were requested to provide written comments, counter-comments in respect of the various input along with necessary justification, so that they may be discussed during subsequent meetings.

6. The meeting concluded with thanks extended to the Chairman and all stakeholders for their participation.

Place: New Delhi

Date: 29.07.2024

Annexure**List of Participants**

S. No.	Name	Organization
1	N K Bhola	Chairman, WPC Wing
2	Munesh Kumar	WPC Wing
3	M K Pattanaik	WPC Wing
4	M P S Alawa	WPC Wing
5	Khagendra Singh	WPC Wing
6	Sachin Kumar	WPC Wing
7	R K Nagaich	WMO
8	Davender Singh Rawat	WPC Wing
9	Yogesh Nandwani	WMO
10	Shalini Gupta	WPC Wing
11	Antrix Gupta	WPC Wing
12	Col. Sukhdeep	Indian Army
13	Cdr. Rajat Rana	Indian Navy
14	Wg. Cdr. Vikas Jakhar	JCES
15	H S Srihari	DCPW
16	Vinay Barthwal	DCPW
17	Umesh	AAI
18	Ravi Tulsian	IN-SPACE
19	Kumar Appaiah	IIT Bombay
20	Chander Murthy	IISc Bangalore
21	Divya Oberoi	NCRA/ GMRT
22	Alka	Tata Communications
23	Munesh Gaur	Tata Communications
24	Anil Tandon	BIF
25	Sundeep Kathuria	BIF
26	Vikram Tiwathia	COAI
27	Sendil Kumar	Ericsson
28	Ashish Garg	GSMA
29	Bharat Bhatia	IAFI
30	Misha Bajpai	ITU-APT Foundation
31	Bimal Chopra	RJIL
32	Murali Medudula	RJIL
33	Swati Rawat	RJIL
34	Jitendra Singh	Qualcomm
35	Punit Rathod	Qualcomm
36	Saurabh Mittal	Airtel
37	Rajath Ali	SIA India
38	Suresh Warriar	Elena Geo
39	Suresh Kumar Karthikeyan	Susan Future Technologies
40	Uttam Podder	IT Tripura

41	Deepak Kumar Viswakarma	
42	Manish	
43	Kantha Shree	
44	Pallavi	
45	Parag Kabat	
46	Renuka	
47	Shiv Kumar Pandey	
48	Vinit	
49	Y Trihan	

**Summary Record of the First Meeting of Working Group 3 of NFAP 2022 Review/
Revision Committee**

Committee Room, Sanchar Bhawan

26.07.2024, 1430 Hrs-1600 Hrs

(Virtual)

No. of participants: 49

Session Chair: M K Pattanaik, WG-3 Chair

Participating organizations:

AAI, BIF, COAI, DCPW, DGCA, Ericsson, GSMA, IAFI, JCES, MIB, IN-Space, IITs, SATCOM-PO, Nokia, RJIL, Qualcomm, and Susan Future Technologies. Additionally, officers from the WPC Wing/WMO and other divisions of DoT also participated.

Documents considered:

1. Draft NFAP Revision Text from WG-3 Coordinator
2. ISRO: Modification to Footnote - IND 30 by addition of new frequency bands.
3. Susan Future Technologies: Allocation of band 6440-6520/ 6560-6640 MHz for Gateway Links for HAPS to Ground, Ground to HAPS and Inter-HAPS as per RR No. 5.457
4. DCPW: Input on IND 17 and 6 GHz IND Footnote for dedicated Police usages
5. IAFI: Use of Wireless Access Systems (WAS) including Radio Local Area Network (RLAN) in 6 GHz

Note: Sl. No. 4 and 5 were late submissions.

Proceedings of the meeting:

1. Review of Frequency Allocation Tables (FATs) of NFAP-22 from 6-17.5 GHz as per WRC-23 Final Acts. There was agreement to the changes proposed in Draft NFAP Revision Text.
2. Review of International Footnotes from 5.457 to 5.511H as per WRC-23 Final Acts. There was agreement to the changes proposed in Draft NFAP Revision Text.
3. Review of India Footnotes IND 17 & IND 30, Consensus on modified IND 30 Footnote proposed by ISRO contribution.
4. DCPW was requested to submit proposed Text for MOD IND17 and new text for identification of portion of 6 GHz band for exclusive DCPW use, for further consideration by members.
5. Input from Susan Future Technologies: Mr. Suresh, from Susan Technologies agreed to lead offline activities to formulate suitable text for proposed IND footnote
6. Input from DCPW: DCPW to provide suitable text for proposed IND footnote for consideration in the next meeting
7. Input from IAFI: Contribution is outside scope of NFAP Review. However, considering importance of the subject, it was agreed to carry out informal discussion on the matter. The output shall not be part of NFAP, but will be part of Chairman's final report. Mr. Bharat

Bhatia, President IAFI agreed to lead offline activities to formulate suitable text for proposed IND footnote.

8. There was a request from Reliance Jio to have a similar activity as 7 above, for IMT in upper 6 GHz Band. It was agreed unopposed. The output shall not be part of NFAP, but will be part of Chairman's final report. Mr. Vinay Srivastava, Reliance Jio agreed to lead offline activities to formulate suitable text for proposed IND footnote.

9. Tentative Agenda for the Second meeting

- a) Oral report from the offline groups Chairs on the progress of their activities.
- b) Consideration of the input received from organisations who agreed to provide new/modified IND Footnote in the 6-17 GHz Band in this (First WG-3) meeting.
- c) Review of Frequency bands 17-31 GHz and consideration of new inputs in the respective frequency range
- d) Review of International Footnotes from 5.514 to 5.542
- e) Review of India Footnotes IND 16, IND 17, IND 31, IND 32 & IND 33
- f) Any other business.

Date of Issue: 29.07.2024



Harsha Ohri
Coordinator (WG-3)
