Government of India
Ministry of Communications
Department of Telecommunications
Wireless Planning and Coordination Wing, New Delhi-110001

R-11012/05/2021-Conf Dated 02.08.2022

Subject: Minutes of Meeting of National Preparatory Committee (NPC) for WRC 2023 held on 29.07.2022.

A meeting of NPC for WRC-23 for WRC-23 was held under the Chairmanship of Director, WMO at Sanchar Bhawan, New Delhi on 29th July, 2022 at 1400 Hrs to finalize draft India views on the Agenda Items; submitted by its five Working Groups. List of participants is placed at **Annexure-I**.

2. Shri. V.J. Christopher, Director WMO and NPC Chairman welcomed all the participants and apprised them of the draft India views prepared on the various Agenda Items that were to be presented before APG23-4 meeting for WRC-23. He emphasized the need to have a wholistic discussion of the views on these Agenda Items to have a final view on them. Shri Gulab Chand, JWA (HQ) also welcomed the participants and provided comments/suggestions to the meeting on various agenda items.

3. NPC working groups prepared contribution documents for APG 23-4 meeting based on stakeholders' consultations and their views on the allocated agenda items. Draft documents were also uploaded on DoT website on 26.07.2022 (at https://dot.gov.in/latestupdates/draft-india-views-apg23-4-meeting-discussion-national-preparatory-committee-world) and presented before the meeting and the views were deliberated upon and finalized. Working Group wise views are placed at **Annexure-II**.

NPC WGs	Chairmen (Name, Designation, Email)	Topics (WRC 2023 Agenda Items)
WG-1	Sh. MPS Alawa, Sr. DWA ms.alawa@nic.in	Fixed, Mobile & Broadcasting issues (1.1, 1.2, 1.3, 1.4, 1.5, 9.1 (c), Article 21.5)
WG-2	Smt. M. Revathi, Sr. DWA m.revathi@nic.in	Aeronautical and maritime issues (1.6, 1.7, 1.8, 1.9, 1.10, 1.11)
WG-3	Sh. Ajay Singhal, Sr.DD singhal.ajay@nic.in	Science issues (1.12, 1.13, 1.14, 9.1(a) and 9.1 (d))
WG-4	Sh. M.K. Pattanaik, Sr. DWA pattanaik.mr@gov.in	Satellite issues (1.15, 1.16, 1.17, 1.18, 1.19, 7)
WG-5	Sh. Anil K. Soni, Sr. DD anilk.soni@nic.in	General issues (2, 4, 8, 9.1 (b) and 10)

4. Meeting appreciated the work done so far by the NPC Working Groups for coordination with the stakeholders for preparing Indian contributions w.r.t. APG-23-4. All stakeholders and

Working Groups Chairs were requested to continue the work for other upcoming meetings w.r.t. preparation of WRC-2023.

Meeting ended with vote of thanks.

S/d
(Sachin Kumar)
Assistant Wireless Adviser
International Spectrum Regulation Group
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To: All participants

Copy to:

1. Sr. PPS to Secretary (T)
2. Sr. PPS to Member(T)
2. Wireless Adviser, WPC Wing

Annexure-I

List of attendees in NPC Meeting on 29.07.2022

S. No.	Name and designation of Participant	Organisation	Contact No.	e-mail Address	Signature
1.	Ashish Tayal, Director R-I	TEC	9013132496	dirrl.tec-dot@gov.in	
2.	Arun Agarwal, DDG(R)	TEC	9868134011	arun.agarwal@nic.in	
3.	Yogesh Nandwani, Dy	WPC Wing	9212509196	y.nandwani@gov.in	
4.	Shalini Gupta	WPC Wing	8707744937	shalini.gupta03@gov.in	
5.	GAGAN DEEP BAJAJ	VIL	9891005969	gagandeep.bajaj@vodafoneidea.com	
6.	NITIN SINGH-AGM	VIL	9312047110	nitin.singh@vodafoneidea.com	
7.	ASHISH GARG	GSMA	9654431089	AGARG@GSMA.COM	
8.	RAKESH MEHROTRA	Samsung R&D Institute India	9212805000	r.mehrotra@samsung.com mehrotra.r@gmail.com	
9.	M.K. Pattanaik	WPC	9013132708	pattanaik.m@gov.in	
10.	M.P.S. Alawa	WPC	9013137116	ms.alawa@gov.in	
11.	Ram Lagan Ram, Sr.DWA	WPC Wing	9868138875	rlagan.ram@gov.in	
12.	Jitendra Singh	Qualcomm	9871115660	jitendra@qti.qualcomm.com	
13.	Sandil Kumar	Ericsson	7042249542	sandil.kumar@ericsson.com	
14.	Raj Vikrant	COAI	9910778187	amcoordinator@coai.in	
15.	P.S.M. Tripathi	WPC	9868135842	psm.tripathi@nic.in	
16.	Rahul Chaudhary	AAI	9818262461	crahul@aai.aero	
17.	Umesh Kumar, AGM(CNS)	AAI	9910357799	agmcnschq@aai.aero	
18.	M. Revathi	WPC	9013136180	m.revathi@nic.in	
19.	GULAB CHAND	"			

S. No.	Name and designation of Participant	Organisation	Contact No.	e-mail Address	Signature/Mode of participation
19.	V.J. Christopher, Director	WMO	9868139666	vj.christopher@nic.in	
20.	Sachin Kumar AWA	WPC			
21.	L.D. Mahwal, Sr.DWA	WPC	9868135529	ld.mahwal@nic.in	
22.	Anil Verma Sr.DWA	WPC	9560794071	aic.verma72@gov.in	
23.	DRSH Raj Bhadana	SIA-INDIA	9289421222	dashiraj.bhadana@sia-india.com	
24.	ANIL PRAKASH	SIA-INDIA	9811155846	anil.prakash@sia-india.com	
25.	Devendra Kumar Rai	GIC NRHQ	8770718097	devendra.rai@gov.in	
26.					
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List of remote attendees in NPC Meeting on 29.07.2022

S. No.	Name and designation of Participant (Mr./Mrs.)	Organization
1	Pratik Mevada	DoS/ISRO
2	Kumarmohan	DoS/ISRO
3	Dhawal Upadhyay	DoS/ISRO
4	Prafulla	DoS/ISRO
5	Sofi	DoS/ISRO
6	Col. Vikas	JCES/MoD
7	Gaurishankar Kesarwani	Add. Director, MIB
8	Vikram Tiwathia	COAI
9	Ekta	Airtel
10	Murali Medudula	RJIL
11	Satish Jamadagni	RJIL
12	Vinay Srivastava	RJIL
13	Pravin Raybole	GMRT-Pune
14	Pravin Raybole	GMRT-Pune
15	Ankur	GMRT-NCRA
16	Dr. Vinosh James	QC / 5GIF
17	Punit Rathod	QC / 5GIF
18	Jose Jacob	NIAR Hyderabad
19	Ajay Kapur	AAI
20	Kranthi Chand	Dhruva Space
21	Bharat Bhatia	IAFI
22	Rajith Ali	Sia-India
23	Ajay Singhal	WMO
24	Vishal Singh Yadav	WMO
25	Anil Kumar Soni	WMO
26	Ramesh Chandra Malik	WMO
27	Prateek Srivastava	WMO
28	Arun Kumar	WPC
29	Preetam Meena	WPC
30	Sandeep	WPC
31	Manoj Kumar	..
32	Akhilesh	..
33	Amit V.	..
34	Subash	..

Annexure-II

Working Group 1: Fixed, Mobile and Broadcasting issues

Agenda Item 1.1

This Agenda Item was discussed in detail, views and recommendations of the stakeholders on the Agenda Item were noted and there were suggestions that in the preliminary view of India, there should be proposal to review power-flux-density limit criteria in RR No. 5.441B in the frequency range 4800-4990 MHz in accordance with Resolution 223 (Rev.WRC-19). Later, based on the outcomes of ITU-R studies, it would be better to comment on reinstating the pfd limit. One Govt. user raised objection on it and requested not to alter the pfd limit in the frequency range 4800-4940 MHz for protection of stations of the AMS/ MMS located in international airspace or waters. Therefore, the committee was of the view that the final views for next ITU/APG meeting would be taken after internal discussion with Govt. user. Meanwhile, the PV suggested by WG-1 should be taken for APG23-4.

Preliminary Views

4800-4940 MHz:

India supports protection of stations of the aeronautical mobile service (AMS) and the maritime mobile service (MMS) located in international airspace or waters (i.e. outside national territories) and operated in the frequency band 4 800-4 940 MHz on the basis of the pfd limit provided in RR **5.441B** in addition to resolve of Resolution **223 (Rev.WRC-19)**.

4940-4990 MHz:

India supports review of the pfd limit provided in RR **5.441B** for the protection of the stations in the maritime mobile service, located in international waters (i.e. outside national territories) and operated in the frequency range 4 940-4 990.

Agenda Item 1.2

India's preliminary views in the draft document on this Agenda Item was agreed upon except few editorial changes.

Preliminary Views

– 3 300-3 400 MHz (amend footnote in Region 1, and Region 2);

India supports the band for IMT identification for global harmonization of band for economies scale benefit and supports studies to protect adjacent band existing services.

– 6 425-7 025 MHz (Region 1) ;

India is of the view that for any possible IMT identification in the band 6 425-7 025 MHz in Region 1, shall ensure protection of the satellite services in Region 3.

– 7 025-7 125 MHz (globally);

India supports possible identification in this range for IMT for global harmonization and benefits of economies of scale and is of the view that any possible identification of the band for IMT shall protect existing services and not impose undue regulatory or technical constraints on existing primary services allocated in this band.

Agenda Item 1.3

The committee was of the view that upgradation from secondary to primary services in Region 1; will have negligible impact on services in Region 3. Hence India views should support the upgradation while ensuring protection to the existing satellite usages in the band 3 700 – 4 200 MHz in India/ Region 3.

Preliminary Views

India supports the allocation of the frequency band 3 600-3 800 MHz to the mobile, except aeronautical mobile service to primary services within Region 1 based on the sharing and compatibility studies as per Resolution **246 (Rev.WRC-19)** while protecting existing and planned satellite services in the band in Region 3.

Agenda Item 1.4

The Committee was of the view sharing and compatibility studies be supported for the use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz, however there should be technical and regulatory requirements for protection of existing and planned satellite services in the proposed bands & adjacent bands.

Preliminary Views

India supports technical and regulatory provision for the protection of existing and planned satellite services in the band 2500-2690 MHz and in the adjacent band 2483.5 -2500 MHz.

In addition, India supports technical and regulatory provisions required for protection of existing and planned IMT services in the proposed bands below 2.7 GHz

Agenda Item 1.5

The Committee agreed upon PV in the draft India document. Any changes made to RR provisions in Region 1 under this Agenda Item should not impact any existing and planned usages in the band and also should not impose any procedural or regulatory constraints for RR provisions in Region 3.

Preliminary Views

India is of the preliminary view that any changes made to RR provisions in Region 1 under this Agenda Item shall not impact any existing and planned usages in the band in Region 3 and also shall not impose any procedural or regulatory constraints on existing services in Region 3.

Agenda Item 9.1 topic c)

Suggested views were agreed by the committee.

Preliminary Views

India supports studies on the use of IMT systems for fixed wireless broadband in the frequency bands allocated to the fixed service on primary basis, taking into account the relevant ITU-R studies, Handbooks, Recommendations and Reports. The IMT systems for fixed wireless broadband shall not impose restrictions or shall not cause interference to other radiocommunications services

Verification of RR No. 21.5

As per ongoing studies at WP5D, the station with integrated AAS with no provision to measure conducted power raised difficulties to provide data against the Item Identifier 8AA "Power delivered to the antenna" (see RR Appendix 4 Table 1). To deal with the situation WP5D studies has been split into two approaches, i) TRP with reference bandwidth, and ii) derive conducted power from TRP for single transmitter.

India Views

India would continue to participate in the ITU-R Working Party 5D meetings with a view to support the approach which will ensure appropriate protection to satellite services and give opportunities for IMT growth and innovation in active antenna system.

Working Group 2: Aeronautical and maritime issues

Agenda Item 1.7

The members of the committee agreed upon the views with suggestions that:

- "Deciding final method is still on preliminary stage as one meeting of WP 5B is pending, hence in the PV, the text should be *India can support Method B1/ B2 "*

- *No protection limit to radio astronomy band - needs rephrasing - it needs protection from new AMS satellites (outside band emissions) as it is very close to primary service of RAS 150-153 MHz RAS band. This new service shall not cause harmful interference to RAS band* - (GMRT- Pune)

Preliminary Views
India supports a new co-primary allocation for the AMS (R)S in the band 117.975 MHz-137 MHz in the Earth-to-space and space-to-Earth directions limited to internationally standardized aeronautical systems operating in accordance with ICAO SARPs, while ensuring protection and not constraining the incumbent services in the band and adjacent bands.

Agenda Item 1.9

Draft India views on the Agenda Item was modified after discussion by the Committee members.

Preliminary views
India supports the proposed changes to Appendix 27 of RR to allow new modern/digital wideband HF communication systems using contiguous and/or non-contiguous 3 kHz channels coexisting with current HF voice and data systems.

Agenda Item 1.10

It was conveyed that:
"Monte Carlo simulation studies suggest that less than 0.01% protection criteria is required for the existing services radiolocation service (RLS), aeronautical radionavigation service (ARNS) and fixed-satellite service (FSS) (earth-to-space). Hence, the study supports co-existence with possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications."

Hence, it was decided that India would support new allocation for Aeronautical Mobile Service in 15.4-15.7 GHz; and new allocation for AMS in the frequency band 22-22.21 GHz subject to wait for results of further studies. It was also suggested that for introduction of new non-safety

AM(OR)S applications, the intended use should not cause harmful interference to incumbent services operating in-band & adjacent bands.

Preliminary views

India supports a new allocation in the bands 15.4-15.7 GHz and 22-22.21 GHz to the aeronautical mobile (off-route) service for the introduction of new non-safety aeronautical mobile (off-route) applications and the intended use shall ensure protection and not constraint the incumbent services operating in-band and adjacent bands.

Working Group 3: Science Issues

Agenda Item 1.12

Working Group suggested that no change to the RR should be considered in respect of current allocation to EESS (active) for spaceborne radar sounders within the range of frequencies around 45 MHz, as there are extensive current usages and plans for future uses. There were recommendations that:

- Concern raised by Govt. user & GMRT should also be considered.
- Space borne radars and other applications may be promoted as these applications may help in research & other meteorological studies. Studies should be promoted since justification for not supporting the studies without considering the outcomes was illogical.
- Govt. user pointed out that they had been using 215 frequency spots in the band 40-50 MHz. So, change in RR might affect their applications.

Considering above, it was finalized that India would support the ongoing studies in ITU-R instead of conveying "No change in RR". Based on result of studies, ensuring protection to incumbent usages in in-band & adjacent bands would be promoted. At this stage, it would be too early to comment upon change/ no-change in RR.

Preliminary Views

India supports studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution 656 (Rev. WRC-19).

Agenda Item 1.13

The committee members were convinced of the view that hardly one/ two SRS stations would be planned at particular locations only and in the remotest part (inhabitable areas) that would probably require protection distance of 100 km approx. Hence, India's PV should be as:

Preliminary Views

India supports the studies for consideration of possible upgradation to the SRS from the secondary status of the allocation to primary status in the frequency band 14.8-15.35 GHz on the basis of the results of studies by the ITU-R, while ensuring protection and not imposing constraints on incumbent services and its/their planned usages in this frequency band as well as in the band 14.44 – 14.50 GHz and 15.35 - 15.4 GHz.

Agenda Item 1.14

The Committee members agreed upon PV in the draft India document.

Preliminary Views

India supports the consideration of possible adjustments of the existing or new primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz in accordance with Resolution 662 (WRC-19) subject to the outcome of the results of ITU-R studies. Any changes to the EESS (passive) allocations in the frequency range 231.5-252 GHz shall not adversely affect the operation of other primary services in this frequency band.

Agenda Item 9.1 Topic A

It was agreed that India would support ITU-R studies on these Agenda Items.

Preliminary Views

India supports ITU-R studies relating to the identification of space weather sensors, their technical and operational characteristics, spectrum requirements and appropriate radio service designations with a view to describing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services.

Agenda Item 9.1 Topic D

Preliminary Views

India supports studies in ITU-R for the protection of EESS (passive) sensors operating in the band 36-37 GHz from non-GSO FSS systems in the band 37.5-38 GHz, while ensuring that no additional constraints are placed on incumbent services in the band 37.5-38 GHz with due consideration of operational aspects of non-GSO FSS system, leading to ITU-R Recommendations and/or Reports, as appropriate.

Working Group 4: Satellite Issues

Agenda Item 1.15

Stakeholders had earlier provided inputs expressing support for the ongoing studies at ITU-R, WP-4A which has developed a draft version of the CPM text where the two options/methods: No Change and Modification in RR with a supporting resolution is proposed.

ISRO has submitted comment on 29.07.2022 where concern is expressed regarding allowing ESIM in 12.75-13.25 GHz planned FSS band for GSO. As per ISRO allowing ESIMs in the planned band will result in proliferation of number of satellite filings in this band also, similar to the non-plan band (14-14.5 GHz/10.95-11.2 GHz, 11.45-11.7 GHz)

On examination of Res 170 (WRC-19) it appears that a very large no. of satellite filings have come up in the recent years, which indicates high commercial interest in the band.

It is relevant to mention that while substantial amount of commercial operation happen in the non-plan band mentioned at para 2, as well as the 17.7-20.2 GHz/27.5-30 GHz band, the plan bands can be used by the national systems for their own domestic purposes. From DoS input it is apparent that, with several orbital filings from other countries it will be difficult to obtain coordination for subsequent filings. Accordingly, preliminary views are suggested:

Preliminary Views:

The use of the 12.75-13.25 GHz frequency band for FSS GSO applications by the ITU member states is regulated by AP 30B procedure of the Radio Regulation. It must be ensured that the GSO orbital positions and frequency resources in this band are available to all member states in an equitable manner. In order to achieve this objective, all counties, especially the developing countries must be able to modify their existing allotments and assignments and operate additional systems in this frequency band without having to deal with an excessive amount of international coordination requirement.

Considering that finite non-planned C and Ku bands resources available in the geo-stationary arc have fully been exploited by the early entrants, allowing ESIM in AP30B band could pose substantial challenge in the coordination process when developing countries go for modification to their allotments to enhance the scope of the usage of this allotted resources to meet today's requirement of smaller user terminals,

Accordingly, India is of the view that ESIMs operations under FSS GSO networks in 12.75 - 13.25 GHz should not be permitted.

Agenda Item 1.16

Preliminary Views:

India supports the studies by the ITU Radio Communication Sector for developing appropriate technical, operational, and regulatory measures to facilitate the use of the frequency bands 17.7-18.6 GHz and 18.8-19.3 GHz and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30 GHz (Earth-to-space) by non-GSO FSS earth stations in motion. while ensuring due protection, to the existing services and their applications in these frequency bands and adjacent bands.

Earth Stations in Motion should be permitted to operate only with the specified technical, operational, and regulatory conditions to ensure that their deployment do not cause interference or put constraints on the existing stations operating in accordance with the provisions of the Radio Regulations.

Agenda Item 1.17

It was discussed that there is a need for inter- satellite links as these satellites could take Earth image data with greater visibility; However, it was suggested that frequency bands where O_2 absorption is high could be identified for inter-satellite links since these bands are not suitable for FSS (Earth to space/ space to Earth.). These bands can be used for satellite links.

Following DoS suggestion on this Agenda Item was agreed by the Committee members. India, like several other countries, uses the 11.7-12.7 GHz for providing BSS & FSS services. Satellite downlink and Microwave backhaul systems operate in the 17.7-19.7 GHz band and satellite uplink are used in 27.5-30GHz, which need be protected from introduction of the new service. India will continue to use these band for the services mentioned above.

Preliminary Views:
India supports the development of appropriate regulatory framework to enable the operation of satellite-to-satellite links within the FSS in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz, while ensuring protection of existing services, their current and future applications and expansions in the same and adjacent frequency bands.

Agenda Item 1.18

Agenda Item mostly concerns with Region 1 & Region 2 and have no impact on India. Hence, India supports the sharing and compatibility studies while ensuring protection without any constraints to the incumbent services operating in the band and adjacent bands in Region 3.

Preliminary Views
India is of the view that potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems should not impose any constraints to the incumbent services operating in the concerned frequency bands and adjacent bands in Region 3

Agenda Item 1.19

Agenda Item mostly concerns with Region 2 and have no impact on India. Hence, India supports the sharing and compatibility studies while ensuring protection without any constraints to the incumbent services operating in the band and adjacent bands in Region 3.

Preliminary Views

India is of the view that new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2 should not impose any constraints to the incumbent services operating in the concerned frequency bands and adjacent bands in Region 3

<u>Agenda Item 7:</u>

The Committee members agreed upon PV in the draft India document.

Preliminary Views

Topic A:

To ensure the efficient and interference free use of space spectrum, India supports the development of equivalent limits for Tolerances for certain orbital characteristics of non-GSO space stations of the FSS, BSS and MSS.

Topic B:

India support the development of post-milestone procedure for systems that are subject to Resolution 35 (WRC-19).

Topic C:

This is a slightly complex issue. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic D:

For Topic D1:

India support modification to appendix 1 to annex 1 of RR AP30B to align the values of orbital separation to those in section 1.1 and 1.2 of the annex adopted by WRC-19.

For Topic D2 and D3:

This topic would be further discussed and developed by WP 4A in subsequent meetings. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic E:

India supports AP30B Improved procedures for new Member States

Topic F:

This topic would be further discussed and developed by WP 4A in subsequent meetings. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic G:
An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic H:

India supports these changes to ensure long term protection of Plan assignments/allotment.

Topic I:
This topic was introduced in the last WP-4A meeting, which was adopted for further discussions. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic J:
India supports the proposed modifications to Resolution 76 (Rev.WRC-15) that would ensure measures to protect GSO FSS & BSS networks

Topic K:
This topic was introduced in the last WP-4A meeting, which was adopted for further discussions. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Topic L
This topic was introduced in the last WP-4A meeting, which was adopted for further discussions. An appropriate preliminary view shall be formed based on the discussions and progress in subsequent WP-4A meetings.

Working Group 5: General Issues

Agenda Item 2

This is a standing agenda item in every WRC and its main purpose is to examine revised ITU-R Recommendations to determine their suitability for incorporation by reference in RR, contained in Volume-IV. Resolution 27 (Rev.WRC-19) resolves that WRC reviews the ITU-R Recommendations that have been revised during the preceding study period. The revised ITU-R Recommendations will be examined based on the results of the CPM23-2 for arriving at a final position.

Preliminary Views

India supports the examination and review of ITU-R Recommendations incorporated by reference into the Radio Regulations, and where appropriate, updating of these references.

Agenda Item 4

This is a standing agenda item in every WRC and its main purpose is to review the Resolutions and Recommendations of previous conferences in RR Volume-III**,** Edition 2020. WRC-23 shall determine whether there is a need for any modification or suppression of the concerned Resolutions or Recommendations from previous WRCs in accordance with Resolution 95 (Rev.WRC-19). It may be noted that review will focus only on those Resolutions/ Recommendations that are not related to any other agenda item of WRC-23.

Preliminary Views

India supports the principle and intent of Resolution 95 (Rev.WRC-19) to ensure Resolutions and Recommendations of previous WRCs are relevant and kept up to date.

Agenda Item 9.1 (Topic b)

In the RR, the frequency band 1240 – 1300 MHz is globally allocated to the radio navigation satellite service (Space-to-Earth) on a primary basis and the amateur service on a secondary basis. The portion 1260 – 1270 MHz is also allocated to the amateur satellite service on a secondary basis by footnote **5.282**.

Preliminary Views

India supports ongoing ITU-R studies in line with Resolution **774** (**WRC-19**) to ensure the protection of RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1240-1300 MHz.

Agenda Item 10:

This is standing agenda item in WRC under which proposals for finalising agenda items for WRC-2027 are decided.

WG-5 received one proposal for sharing studies for IMT identification in new frequency bands. Working Group members suggested to conduct a meeting and take the views of DOS being the

affected party; The Agenda items would be discussed in the next meeting of WG. Hence, presently contribution was not recommended by the WG for upcoming APG meeting. Following views were expressed on the above document:

- RJIL representative has apprised the committee that Draft resolutions have been submitted but did not get approved due to objection raised by DOS on the views and that's why it was not approved. The proposal was about studies to have an Agenda Item in next WRC (WRC-27) for possible identification of spectrum studies for IMT in two bands on sharing basis i.e. 90-300 GHz (sub-tera Hz bands) & 7.125 GHz -24 GHz

- Representative from 5G India Forum/ Qualcomm India recommended that potential sharing studies should be promoted in above bands for identifying spectrum for IMT-2030. However, because of the objections raised by DOS, India should not refrain from submitting contribution. India is looking forward for identification of bands in Tera Hz for WRC-27, propagation models etc. for IMT-2030.

- Representative from Ericsson stated that major stakeholder ISRO was not convinced and had carried forward the document for next meeting. However, ISRO had suggested in 6G Task force meeting that that they were ready to look forward for new spectrum bands above 100 GHz. Hence, it was suggested that India views could be taken that studies for looking forward new bands for IMT 2030 might be supported.

- Representative from 5GIF stated that 6G TIG report is expected soon and TIG committee would be recommending several frequency bands above 100 GHz. It was suggested that reciprocating the same view for APG meting should be promoted. Following text was suggested "Spectrum is critical and essential for future IMT development for 2030. It is therefore essential that WRC-23 consider the future need of spectrum for 2030 and beyond in a new agenda item for WRC-27. India supports studies on frequency-related matters for IMT identification including possible additional allocations".

All the above suggestions were noted and JWA (HQ) expressed his opinion that multicounty proposals to support studies for IMT identification might be explored in this regard. Since, the proposal could not achieve consensus in the Working Group, it was also deliberated that, India might support this agenda item in the next APG meeting based on International developments in this area for identifying new spectrum bands and promoting studies.

Other Issues

JWA (HQ) further asked all NPC WG Chairs to explore and suggest methods for incorporation of use of 500 MHz and 600 MHz frequency bands for IMT in India in the Radio Regulations. WG-5 chair suggested that country specific footnotes can be added/ deleted in Radio Regulations under Agenda item 8. Stakeholders were encouraged to bring contribution on this aspect.