

## **Quarterly Newsletter-1**

# **QUARTER HIGHLIGHTS (JANUARY TO APRIL 2023)**



Dear Respected Member, ITU-APT Foundation of India (IAFI) is delighted to share about the quarterly activities.

**Building the case for Direct to mobile using 3GPP 5G Broadcast for India's Broadcast Digitalization:** Mr. Bharat Bhatia, President, ITU-APT Foundation of India (IAFI) suggested, a New Business Model for MIB and its units Door Darshan / Prasar Bharati and TSPs, using 3GPP 5G Broadcast technology and seamlessly integrating their network with 3G PP based 5G cellular networks of the TSPs. He also emphasized on how a broadcaster will earn revenue by licensing spectrum and leasing airtime, the cellular operator (TSPs) and OTT players may use this model as a way to reach new subscribers.

**Letter to MOC:** IAFI in its recent letter to Shri. Ashwini Vaishnaw, elucidated about the economic benefits of 6 GHz Wi-Fi, such as the capabilities required for advanced use cases as Wi-Fi 6E it delivers faster speed, lower latency, higher efficiency, and higher density. 6GHz band is currently extensively used by satellites for up linking of broadcasting channels as well as by VSAT for providing data connectivity. This letter emphasizes on opening of the 6 GHz band for license exempt use of Wi-Fi urgently so that software and hardware exporters in India could access the untapped global market.

**Call with CUTS and Wi-Fi 6GHz project members:** IAFI organized a call with CUTS and Wi-Fi 6GHz project members on 25th Jan 2023 wherein CUTS presented emerging findings of a consumer perspective on 6Ghz band they also shared the status of updates on the deliverables under this project.

**43**<sup>rd</sup> **Working Party 5D:** 43rd 5D which is responsible for the overall radio system aspects of IMT (4G, 5G and 6G) began on the 31st of Jan and concluded on 9th February. 4 contributions have been submitted by IAFI on IMT multimedia, IMT Applications and FSS band frequency, IMT Vision





**IAFI meeting with ITU deputy Secretary General:** Mr. Bharat Bhatia (President, IAFI) met with ITU Deputy Secretary General and discussed our regular contributions in almost every meeting of ITU Groups and discussed collaboration on industrial 5G, sustainable development, CTUC, enhanced participation of the Industry in ITU activities through fellowships to attend ITU meetings, etc."

**5<sup>th</sup> National Preparatory Workshop for WRC-23:** ITU-APT Foundation of India (IAFI) organized the 5th National Preparatory Workshop for WRC-23 on 14th February, Tuesday at CSOI, KG Marg. The Inaugural address was given by Shri Sanjeev Agarwal Member (T) DoT. The event was also well attended by Industry members, ISRO, DoT & TRAI. This Workshop has been planned to discuss India's participation and preparations for APG-23/5 (Busan, Korea). The workshop was fruitful in nature as it highlighted, the key outcomes and conclusions expected in upcoming APG-23/5 in Korea.

**BES EXPO 2023:** The 27th International Conference and Exhibition on Broadcast & Media Technology was organized at Pragati Madan, New Delhi. Mr. Bharat B Bhatia, President, ITU-APT Foundation of India, presented his views during the session on social media-content creation, delivery and monetization. He emphasized on the Spectrum Challenges of Broadcasting and the way forward.

**Workshop on future Technology trends towards 6G:** IAFI has started its preparation for an outstation-based workshop in Bangalore. This workshop will be focusing on the Technology trends towards 6G, the preparation activities have been initiated by IAFI, and preliminary developments regarding the venue and dates of the workshop have been initiated.

**APG-23/5 (Busan, Korea):** was held from 20 – 25 February 2023 in Busan, Republic of Korea. The meeting was hosted by the Ministry of Science and ICT, Republic of Korea. This meeting was conducted in order to update APT preliminary views on WRC-23 Agenda Items based on input contributions from APT Members. Mr. Bharat Bhatia, President IAFI and Jitendra Singh, Vice President, IAFI along with the Indian delegation were a part of this meeting.

**DCC-SC & Manufacturer Forum (MF) meeting:** TEC is under the process of formulation of new standard on "Interface Requirements for Non-Geostationary satellite orbit (NGSO) based communication networks". IAFI members attended the Joint Development Coordination Committee- Subcommittee (DCC-SC) and Manufacturer Forum (MF) meeting on 24th Feb 2024 and presented our views. IAFI had already submitted its views and the same which were also accepted in the meeting.





**ITU-T- SG3 - Tariff and accounting principles and international telecommunication/ICT economic and policy issues:** The meeting began on 1st of March 2023 and will conclude on 10th of March 2023. DOT and IAFI have jointly submitted a contribution on the creation of Focus Group (FG) on costing models for affordable data services. This contribution will be discussed in this meeting with a view to approve the creation of the new FG. IAFI along with the other members from DOT are actively participating in this meeting

**16th Executive Council meeting:** The 16th EC meeting of IAFI took place on Tuesday, 28th February 2023 at 12:30 PM at the IAFI office with remote participation. The meeting reviewed both past events and current activities of IAFI. The EC also approved 2 new corporate members i.e., Amazon and Conqueror Innovations respectively. The EC further also approved the roadmap and tentative Calendar of events for 2023 and emphasized on the activation of Bangalore Centre office of IAFI.

**NPC Meeting:** Mr. Bharat Bhatia, President, IAFI had attended an NPC meeting where he had presented a document for the upcoming CPM meeting from 27th March to 6th April 2023 at Geneva.

**ITU-T- SG3 approves IAFI proposal to create a new ITU Focus Group (FG) on costing models for affordable data services:** ITU-T SG3 meeting in Geneva from 1st of March 2023 to 10th of March 2023 approved the creation of a new Focus Group (FG) on costing models for affordable data services based on a contribution by IAFI and DOT. IAFI and other members from DoT actively participated in this meeting and got the proposal approved. The meeting also approved the nomination of Mr. Shailendra Kumar Mishra, Advisor Finance, DoT, as the first chairman of the focus group and Zimbabwe as the first vice chairman.

**ITU is set to open its new Area Office and Innovation Centre in India:** The International Telecommunication Union (ITU), United Nations specialized agency for information and communication technologies (ICTs), is scheduled to open its new Area Office and Innovation Centre in New Delhi, India on 22nd Mar 2023. This initiative is fully funded by the Government of India, the office will focus on fostering digital technology uptake in South Asia in line with sustainable development, strengthening technology cooperation, and boosting regional telecommunications development.





**IAFI Recommends TRAI to permit full sharing of active infrastructure and sharing of inter-band spectrum between various licensees:** IAFI has told TRAI that sharing must be permitted across all telecommunication service licenses it will substantially reduce the entrance and operational costs and further reduce the development risks for all operators when offering new services and applications. **This was well covered in the media:** IAFI tells TRAI to permit full sharing of active infrastructure | Communications Today

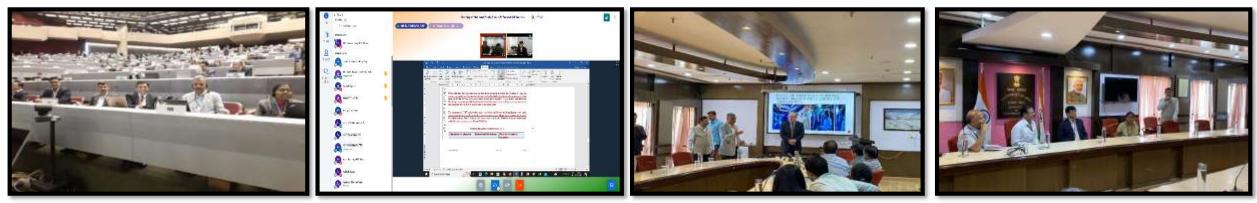
**6Ghz spectrum delicensing:** IAFI has been pushing for delicensing of the 6GHz band for Wi-Fi usage. As 6Ghz spectrum includes scope for improved Wi-Fi speeds leading to the boosting of government's internet accessibility programme. IAFI in its recent letter to Ashwini Vaishnav also emphasized that Wi-Fi using the 6Ghz radio band open up over 1Ghz of extra bandwidth a boon for high congestion.

**IAFI Update on Wi-Fi 6 & 6E:** CUTS International along with IAFI has been conducting an consumer study on 6Ghz Wi-Fi in India to understand, examine, highlight its benefits to the community and consumers as well as future expectations from the 6GHz band. IAFI organized a briefing call with CUTS on 14th March 2023 to brief the stake holders about the Focus Group approach taken by CUTS International in this study. They presented their common choice experiment results along with the way forward with the help of a Questionnaire. <u>Understanding Consumer Perceptions on Wi-Fi Usage (google.com)</u>

**Inauguration of Area Office & Innovation Centre:** The Hon'ble Prime Minister of India, Shri. Narendra Modi inaugurated the ITU-Area Office & Innovation Centre on 22nd March 2023 at Vigyan Bhawan, New Delhi. He noted that a new beginning is taking place in the telecom sector in India on the auspicious day i.e., the start of the Hindu New Year. He emphasized that this decade is India's techade. India's telecom and digital model is smooth, secure and transparent. The Hon'ble PM also unveiled the Bharat 6G Vision document and launched the 6G R&D Test Bed. IAFI along with its delegates actively participated in this event and expressed that it is a proud moment for India and that this innovation center and foster many sustainable goals that ITU aims and aspires for.

**ET5GCongress, India's 6G ambition with the role of Academia and Industry Global Standards:** It is in the interest of the entire telecommunications ecosystem to get people on the 6G bandwagon along with the affordability schemes which will be crucial to drive adoption. This session was moderated by Mr.





**Conference Preparatory Meeting (CPM) for WRC-23:** The second session for CPM for WRC-23, CPM23-2 opened in Geneva for 11 day meeting on 27th March with over 2000 participants and concluded on 6<sup>th</sup> April 2023. IAFI has submitted a one direct contribution and one contribution through the Indian administration to this meeting. Our inputs suggested proposed modifications of the draft CPM report to WRC-23 for Agenda Item 1.2 and Agenda 7, Topic B. A strong IAFI delegation is attending the meeting, both physically in Geneva and virtually.

**Development of Global 6G Standards in the ITU**: IAFI attended a meeting on 13th April, organized by TEC to discuss preparations for the next WP5D and its correspondence group on finalizing the 6G usage scenarios, including a new usage scenario for 6G towards providing ubiquitous connectivity to connect the unconnected, rural and remote areas as a new requirement for the proposed 6G framework. IAFI has already been contributing to the 6G development and standardization work happening at the ITU for the 6G standards. This proposal was submitted by India to the last meeting of WP5D.

**Proposal for a Draft New APT Recommendation:** IAFI has initiated the work for a new proposal on norms for frequency assignment and licensing of satellite networks, gateway earth stations and user terminals. This is done to better serve the increasing demand for spectrum by satellite operators to meet the growing need for high-speed data connectivity, especially in remote and underserved areas. Further suggestions in this area are welcome

**National Conference on 6G Spectrum:** IAFI organized the National Conference on 6G Spectrum Technologies and Standardization by ITU. This event was well supported by the Department of Telecom and the partners of this conference were 5GIF and GSOA. The Chief Guest of the conference was Sanjeev Agrawal, Member Technology. He laid emphasis on the development of India's 5G infrastructure. 6G Spectrum Conference Glimpses are <u>here</u>

**AR/VR Demo:** IAFI organized a demonstration of Augmented Reality (AR), Virtual Reality (VR) technologies at Sanchar Bhawan. Shri V J Christopher, Wireless Advisor, Shri S K Mishra Advisor (Finance) Department of Telecommunication took part in the demonstration. This demonstration was exhibited by Qualcomm, Meta, Wi-Fi Alliance and Parallax Labs. This event was also followed by a networking lunch & dinner.

### MEDIA SHOWCASE: FOLLOWING ITEMS RELATING TO IAFI WERE COVERED IN THE MEDIA

- IAFI hosts World Telecommunication and Information Society Day | Communications Today
- IAFI seeks assignment of satellite spectrum on non-exclusive basis | Communications Today
- Development of the Global 6G Standards in the ITU
- Argument for 6GHz spectrum no crucial for Wi-Fi is misleading, experts say
- IAFI proposes ubiquitous service requirements for 6G standards in ITU
- IAFI seeks creation of national 6G mission, Telecom News, ET Telecom (indiatimes.com)
- <u>5G Spectrum (communicationstoday.co.in)</u>
- IAFI writes to MOC | Communications Today
- V&D December 2022 (3) (1)-min.pdf (itu-apt.org)
- 5G: Atmanirbhar Bharat: India has strong 4G, 5G ecosystem today, says MoS telecom, Telecom News, ET Telecom (indiatimes.com)
- <u>Telecom department committed to spectrum allocation for economic benefits: Official, Telecom News, ET Telecom (indiatimes.com)</u>
- Minister calls for new spectrum strategy to support innovations and manufacturing | Communications Today
- IAFI and TEMA call for simplification of the Draft Telecom Bill | Communications Today
- APT nominates IAFI President to lead Wi-Fi 6 studies | Communications Today
- Don't auction satellite spectrum if you want good rural broadband, says chief of telco body IAFI (theprint.in)
- Asian countries to support India's candidate for ITU Regulation Board elections | Communications Today
- IAFI hosts global workshop on challenges & opportunities in Green Telecom | Telecom Magazine India (communicationstoday.co.in)
- Global UN body ITU adopts 6G mobile technology trends | Communications Today
- IAFI hosts World Wi-Fi Day celebrations | Communications Today
- <u>3GPP approves IAFI's 600 MHz band plan | Communications Today</u>)



### Building the case for Direct to Mobile using 3GPP 5G Broadcast for India's Broadcast Digitization when the the the the the the the problem of the the the the Table and GTT players.





## LINKS TO OUR ACTIVITIES & PROGRAMMES

1) <u>ITU – R CPM Document by IAFI</u>

2) <u>Consumer Perspectives on the 6 GHz</u> <u>Band</u>

3) Augmented Reality/ Virtual Reality Demonstration

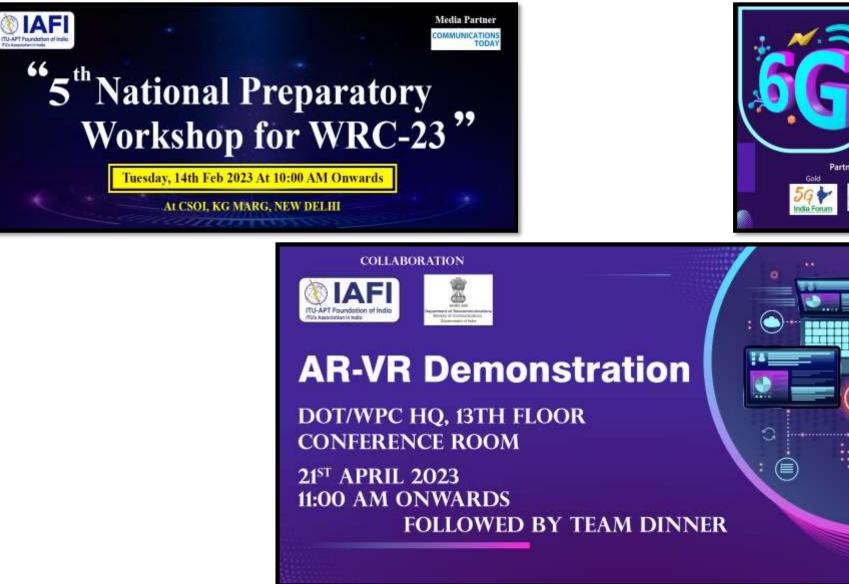
4)<u>TRAI Enabling Convergence of</u> <u>Carriage of Broadcasting and</u> <u>Telecommunication services</u> 5) Development of 6G Global Standards

6) <u>TEC document on Technical</u> <u>Requirements and Operational</u> <u>Requirements for all Non-Geostationary</u> <u>satellite orbit</u>

7) <u>Letter to Secretary Telecom on</u> <u>Licensing framework for establishing and</u> <u>operating Satellite Earth Station Gateway</u> <u>(SESG)</u>

8) <u>Letter to MOC on the License exempt</u> <u>use of 6GHz</u>

# LAST QUARTER IAFI EVENTS





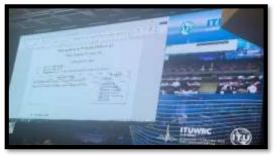
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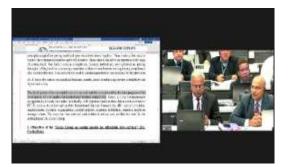
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### ACTIVITIES IN OUR FOCUS AREAS DURING JANUARY TO APRIL 2023

**The 43rd meeting of Working Party 5D: 43<sup>rd</sup> meeting of WP5D:** 43rd 5D which is responsible for the overall radio system aspects of IMT (4G, 5G and 6G) began on the 31st of Jan and concluded on 9th February. 4 contributions have been submitted by IAFI on IMT multimedia, IMT Applications and FSS band frequency, IMT Vision 2030. Many IAFI members have been registered as delegates for the meetings and are actively participating in these meetings. All 4 contributions of IAFI have been successfully presented and accepted.





**ITU-R CPM 23-2:** The second session for CPM for WRC-23, CPM23-2 opened in Geneva for 11 day meeting on 27th March with over 2000 participants and concluded on 6th April 2023. IAFI has submitted a One direct contribution and One contribution through the Indian administration to this meeting. Our inputs suggested proposed modifications of the draft CPM report to WRC-23 for Agenda Item 1.2 and Agenda 7, Topic B. A strong IAFI delegation is attending the meeting, it has been thrilling to see a large and effective Indian delegation participation with 18 physical delegates and many more virtually.

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**Proposal for a Draft New APT Recommendation:** IAFI has initiated the work for a new proposal on norms for frequency assignment and licensing of satellite networks, gateway earth stations and user terminals. This is done to better serve the increasing demand for spectrum by satellite operators to meet the growing need for high-speed data connectivity, especially in remote and underserved areas. Further suggestions in this area are welcome. Furthermore, In the moth of March, The Preparatory meetings regarding the discussions on WRC-23 agenda items in preparations for NPC-23 and APG23-5 meetings have been initiated by IAFI. A few editorial and some suggestive text was finalized in the document of IMT Applications along with WRC Article 21.5. IAFI had also presented and finalized the document on generic unwanted emission characteristics of base stations using the terrestrial radio interfaces of IMT-2020 to indicate the uplink & downlink indicators for IMT bands.

**Letters to DoT by IAFI:** Two different letters were addressed to Shri. Ashwini Vaishnaw, the first letter elucidated about the economic benefits of 6 GHz Wi-Fi, such as the capabilities required for advanced use cases as Wi-Fi 6E it delivers faster speed, lower latency, higher efficiency, and higher density. The second letter focused on the urgency of accelerating momentum for 6G. IAFI also proposed the Creation of a national 6G mission with a fixed budget, time plan, office and mandate, website, logo to drive and fund research into 6G technology. IAFI also wrote a letter to K Rajaraman (Secretary Telecom) about the recommendations on "Licensing Framework for Establishing and Operating Satellite Earth Station Gateway (SESG), explaining on how there is should be a commitment to a fair and non-discriminatory treatment of service licensees/ permission holders.

#### IAFI response to the consultation paper on Enabling Convergence of Carriage of Broadcasting and

**Telecommunication services:** IAFI has submitted its response on this consultation while emphasizing about the need for a Converged Statutory & Regulatory Framework, a must carry-must provide principle. IAFI also included the response from the satellite sector as well as PMSE sector and suggested a unification of the Infrastructure.

**TRAI Consultation on Satellite spectrum:** IAFI has almost finalized its response on the consultation paper of Assignment of Spectrum for Space-based Communication Services. We have inculcated appropriate views on suitable frequency bands, band plan, block size. The date of submission of the consultation paper has been extended to 1<sup>ST</sup> of June 2023