

Quarter Highlights (April to June 2024)

Dear Respected Member,

ITU/APT Foundation of India (IAFI) is delighted to share its previous month's activities with you.



IEEE Strategic Seminar on Future Connectivity: On May 7, 2024, IEEE Mauritius hosted a seminar on 5G/6G and Satellite Communication with Digital Twin Integration at the University of Mauritius. Shri Bharat Bhatia, President of IAFI, presented ITU's 6G vision and Bharat's 6G Mission. The seminar explored how these advanced technologies can integrate seamlessly to enhance global connectivity, with a focus on innovation in satellite-based solutions. The event saw participation from leading researchers, industry professionals, and students, creating a dynamic forum for collaboration.

IAFI Radio Group Prepares for WP-5D: The IAFI Radio Group met on May 8, 2024, in a hybrid format to review recent developments and plan contributions for the 46th WP-5D meeting. Eleven working documents were discussed, with eight selected for further analysis, highlighting key topics such as IMT spectrum usage and disaster-relief communications. IAFI aims to advocate for better allocations to support direct connectivity between space stations and terrestrial networks. The group's preparations reflect its commitment to addressing the technical challenges of evolving communication standards.

54th WP-4A Meeting Focuses on Satellite Spectrum Use: From May 1-9, 2024, the 54th WP-4A meeting convened in Geneva, addressing spectrum use for fixed and broadcasting satellite services. The meeting, attended by 536 participants, reviewed 126 contributions, including IAFI's proposal to revise frequency band sharing conditions for smaller satellite antennas. This marks a significant step toward optimizing satellite networks for emerging applications. Extended meeting durations have been planned to manage the workload associated with multiple agenda items, ensuring timely delivery of studies to WRC-27.

Study Group 9 Examines Advanced Media Capabilities: The ITU-R SG-9 meeting, held May 9-17, 2024, explored telecommunication systems enabling ultra-high-definition television, VR, AR, and other cutting-edge technologies. Representing IAFI, Shri Lahb Singh participated virtually, contributing to discussions on developing standards for these advanced capabilities. The group emphasizes the need to address challenges associated with technological advancements, paving the way for a seamless media experience across platforms.

SG-4 Meeting Reviews Satellite Service Progress: The second SG-4 meeting, held May 10, 2024, in Geneva, reviewed the progress of WP-4A, 4B, and 4C on satellite services, including fixed-satellite, mobile-satellite, and radio-termination satellite services. With 318 participants, the session evaluated WRC-23 agenda items, ensuring a clear roadmap for addressing future satellite communication needs. The meeting underscored the growing importance of efficient spectrum management in the face of increased satellite deployment.

NSG-1 Meeting Explores Spectrum Sharing: The NSG-1 meeting on May 6, 2024, highlighted the critical need for spectrum-sharing strategies amid rising demand. Bharat Bhatia explained the group's role in finding solutions, such as sharing between satellite and terrestrial systems in the Ka and 71-86 GHz bands. He stressed the potential for NSG-1 to drive innovation in spectrum use, particularly in supporting burgeoning applications like autonomous vehicles and IoT networks.

NSG-5 Develops 6G Performance Metrics: NSG-5 and National Working Party 5D groups met in May 2024 to focus on defining performance requirements for 6G technologies. Bharat Bhatia emphasized India's leadership in framing ubiquitous connectivity standards, which form a core pillar of the 6G framework. The meetings addressed both technical and policy challenges, aiming to ensure seamless integration of new technologies into the global ecosystem.

WP-4C Examines Spectrum Utilization: The WP-4C meeting, held April 24-30, 2024, in Geneva, reviewed 75 contributions from global stakeholders. Key outcomes included approval of draft recommendations on IMT-RNSS coordination and revisions to existing ITU-R reports. These developments are critical for enhancing spectrum utilization and ensuring efficient use between satellite and terrestrial systems. The meeting set a foundation for addressing agenda items tied to future communication technologies.

APT/WTSA-24-3 Convenes in Cambodia: The APT/WTSA-24-3 meeting in Siem Reap from April 30 to May 2, 2024, brought together 327 delegates, including virtual participants. The discussions covered 129 documents, with India playing a significant role through 32 contributions. Bharat Bhatia served as a primary editor, helping finalize candidate draft resolutions. The meeting's outcomes are expected to significantly shape telecom regulatory frameworks in the Asia-Pacific region.

10th Asia Pacific Spectrum Management Conference: The 10th Asia-Pacific Spectrum Management Conference was held in Jakarta, Indonesia, on April 23-24, 2024. Jointly hosted by Telkom University and the Ministry of Communications and Informatics, the conference provided a platform for government, industry, and academia to discuss spectrum management issues in the Asia-Pacific region. Shri Bharat Bhatia, President of IAFI, moderated the opening session on WRC-23 outcomes, while Shri Jitendra Singh, Vice President of IAFI, presented on behalf of the GSA.

First Meeting of ITU-R SG-4 Held in Geneva: The ITU-R SG-4 convened on April 23, 2024, in Geneva, marking its first meeting since WRC-23. Focusing on fixed, mobile, broadcasting, and radio-termination satellite services, SG-4 reviewed agenda items assigned to its working parties. With 12 critical items under review, SG-4 emerged as one of ITU-R's busiest groups, setting a robust agenda for future satellite service discussions.

WP-4C Examines Satellite Spectrum Utilization: The WP-4C meeting, held April 24-30, 2024, in Geneva, tackled efficient spectrum utilization for mobile and radio-termination satellite services. The meeting emphasized the need for efficient spectrum use and ensuring spectrum efficiency. IAFI members actively contributed, helping shape solutions for the sector.

Letter to Minister on Telecommunications Rules 2024: In a letter to Shri Ashwini Vaishnaw, Hon'ble Minister of Communications, IAFI President Shri Bharat Bhatia urged early industry consultation on draft Telecommunications Rules 2024. The letter emphasized the importance of stakeholder feedback and the smooth implementation of the Telecommunications Act, 2023, and a stable regulatory environment, particularly for key areas like spectrum allocation and consumer protection.

IAFI Advocates for Green Energy Open Access: In a letter to the Ministry of Power, IAFI requested full adoption of the Green Energy Open Access Rules, 2023, across states. Shri Bharat Bhatia emphasized the need for harmonized infrastructure to support demand aggregation and proposed relaxing technical aspects of ITU-2020/2030 satellite connectivity. The submissions reinforce India's leadership in telecom innovation.

Wireless World Research Forum (WWRF) 6G Huddle 2024: The WWRF hosted the 6G Huddle 2024 in Berlin on April 17-18, focusing on implementing the 6G framework. As Vice Chairman of WWRF, Shri Bharat Bhatia moderated key sessions, including one on ubiquitous connectivity and another on high-altitude platforms and non-terrestrial networks in 6G. The event highlighted the future of 6G technologies and collaborative global efforts.

IAFI Contributions for Upcoming WP-4A Meeting: IAFI prepared two contributions for the May WP-4A meeting, focusing on efficient orbit and spectrum use for fixed and broadcasting satellite services. Virtual meetings with stakeholders, including ISRO and industry experts, helped refine proposals, ensuring alignment with WRC-23 outcomes.

Comments on TRAI's National Broadcasting Policy: IAFI reviewed TRAI's Consultation Paper for India's first National Broadcasting Policy, 2024. Highlighting the fragmented regulatory framework, IAFI stressed the need for a unified policy to streamline broadcasting operations and address emerging technological trends.

Focus Group on Costing Data Meets in Malawi: The second FG-CD meeting, held April 8-10, 2024, in Malawi, addressed affordable data service models. IAFI presented two contributions on market challenges and regulatory strategies for 5G rollout. The meeting set the stage for further studies, with a virtual follow-up planned in August 2024.



Streamlining Spectrum Allocation for VSAT Services: IAFI requested the Department of Telecommunications to streamline spectrum allocation for VSAT services to avoid delays in service launches. The letter emphasized the need for continuity under existing guidelines until new rules under the Telecom Act are finalized.

IAFI Hosts Dinner for ITU TSB Director: On March 19, 2024, IAFI hosted a dinner at CSOI, New Delhi, in honor of Mr. Seizo Onoe, ITU's Director of Telecommunication Standardization Bureau. Senior officials from DoT, BSNL, TEC, and industry experts attended the event. Mr. Onoe also visited C-DOT labs to witness cutting-edge innovations, including Bharat 4G/5G and quantum cryptography solutions, showcasing India's advancements in telecom technologies.

Workshop on IoT and AI for Digital Agriculture: On March 18, 2024, ITU and FAO organized a workshop on advancing agriculture through IoT and AI, co-hosted by TEC and ICAR in New Delhi. Mr. Seizo Onoe highlighted the transformative potential of these technologies for sustainable farming. Demonstrations showcased solutions like early warning systems and 5G-driven agricultural tools, fostering global collaboration in digital agriculture.

IAFI Welcomes TRAI Chairman: IAFI President Shri Bharat Bhatia met with newly appointed TRAI Chairman Shri Anil Kumar Lahoti to discuss priorities for enhancing telecom services. Shri Lahoti, with a distinguished background in engineering and public service, committed to improving call quality and fostering a fair regulatory framework.

Collaboration with UAE for 6G Technology: IAFI held a virtual meeting with the Technology Innovation Institute (ITI), Khalifa University, and UAE officials to advance 6G development. Experts, including Shri Bharat Bhatia and Dr. Lina Bariah, discussed strategies to position the UAE as a leader in 6G research. The collaboration aims to drive innovation and foster international partnerships in emerging technologies.

Workshop on Broadband Public Safety Networks: On March 13, 2024, DoT and MHA held a workshop on Broadband Public Protection and Disaster Relief (BB-PPDR) at Vigyan Bhawan, New Delhi. Shri Bharat Bhatia presented on international standards for public safety networks. The event also discussed implementing a pilot BB-PPDR network in India to enhance disaster response capabilities.

Webinar on Open RAN Best Practices: On March 13, 2024, ITU's FG-CD hosted a webinar on Open RAN, exploring ways to reduce network costs and improve sustainability. This initiative builds on IAFI's earlier proposals to ITU, emphasizing affordable data services and environmentally friendly telecom infrastructure.

IAFI Launches 6G Task Force: IAFI announced the creation of a Task Force on 6G technology to support ITU's IMT-2030 framework. Led by Shri Bharat Bhatia, the task force will drive collaboration among industry, academia, and research institutions to develop innovative solutions for affordable and ubiquitous connectivity.

APT AWG-32 Meeting in Thailand: The 32nd meeting of the APT Wireless Group (AWG) took place in Pattaya, Thailand, from March 4-8, 2024. Over 100 technical contributions were discussed, with IAFI submitting proposals to address key inputs on topics like 6G, PMSE, frequency usage, and satellite communications. The meeting concluded with agreements to host a 6G workshop at the next AWG-33 in September 2024.

IAFI's proposal for Proposed 6G Workshop Gains Traction: A 6G workshop at AWG-33 received unanimous support, scheduled for September 2024, the workshop will focus on IMT-2030 frameworks and deployment strategies. Mr. Senthil Kumar from IAFI will co-convene the event, ensuring active participation from global stakeholders.



Conference on World Wi-Fi Day: On June 20, 2024, the Broadband India Forum hosted a conference in New Delhi to discuss Wi-Fi's role in affordable broadband access. IAFI President Shri Bharat Bhatia highlighted India's position on the 525-7125 MHz frequency band, advocating its use for unlicensed Wi-Fi to enhance connectivity.

IAFI Dinner Reception on 19th June 2024: IAFI hosted a reception to honor retiring telecom leaders and new appointees, while granting honorary memberships to distinguished professionals like Prof. Rajeew Shroey. The event celebrated milestones in India's telecom journey.

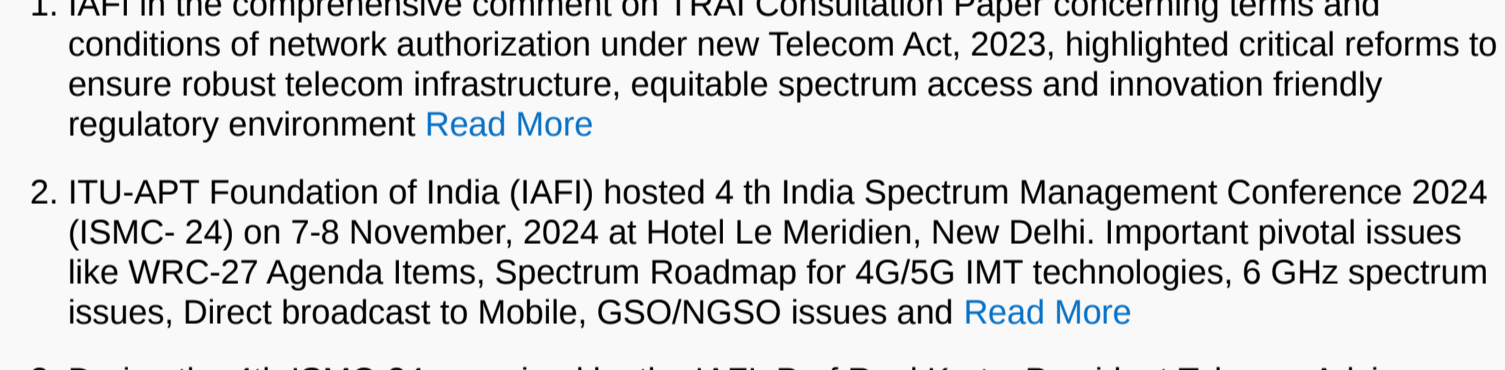
India's Remarkable Leap in 5G Download Speed: India achieved a median 5G download speed of 312.26 Mbps, climbing into the global top 10 for 5G speeds. Strategic investments by Jio and Airtel have enhanced the network infrastructure and transformed connectivity.

Global Mega Event CCW-2024 on Critical Communications: The Critical Communications World 2024, held in Dubai from May 14-16, showcased standards in emergency telecom. Shri Bharat Bhatia highlighted ITU's role in developing innovations and assisting global disaster response efforts.

IAFI Comments on TRAI Consultation Paper Regarding Auction of Spectrum in 37-43.5 GHz Bands: IAFI submitted detailed feedback to TRAI, emphasizing the minWave spectrum's role in expanding 5G services. Recommendations were based on comprehensive industry consultations.

IAFI Radio Group Meeting for 46th WP-5D Preparations: IAFI finalized four contributions for WP-5D, addressing technical aspects of IMT-2020/2030 satellite connectivity. The submissions reinforce India's leadership in telecom innovation.

The DSA 2024 Global Summit: The Dynamic Spectrum Alliance (DSA) hosted a Global Summit from September 23rd to 25th, 2024, in Geneva, Switzerland. Co-located with the Wi-Fi World Congress Europe 2024 - WWCE, the world's exclusive conference dedicated to supporting the global Wi-Fi industry. The DSA global summit brought together policymakers, regulators, and industry professionals for Strategic Spectrum Sharing, focused on innovating and ensuring the future of Wi-Fi. Leading figures from the Wi-Fi industry shared their insights on the potential of 6 GHz Wi-Fi for homes, IoT, next-generation enterprise connectivity, ISPs, MSPs, device innovation, and the cutting-edge advancements in Wi-Fi technology. Shri Bharat Bhatia, President, IAFI is invited as Guest Speaker to address the issue "User's demands in the era of AI and the path to 6G Services" and joined panel discussion along with Mr. Masanori Kondo, Secretary General, APT, Mr. Chris Woodford, Director of International Spectrum Policy - Ofcom and Chairman - Electronic Communications Committee (ECC) of CEPT and Mr. Mercedes Arana, President, Communications Services Regulatory Unit (URSEC). The year 2024, marked a significant milestone in technological history as the world celebrated the 25th anniversary of Wi-Fi. In the year 1999, the Wi-Fi Alliance released the standards for the Wi-Fi technology. This ground-breaking technology has revolutionized our lives, and its widespread adoption can be attributed to the efforts of the Wi-Fi Alliance (formerly known as the Wireless Ethernet Compatibility Alliance - WECA).



Media Showcase: Following items relating to IAFI were covered in the media

- IAFI in the comprehensive comment on TRAI Consultation Paper concerning terms and conditions of network authorization under new Telecom Act, 2023, highlighted critical reforms to ensure robust telecom infrastructure, equitable spectrum access and innovation friendly regulatory environment. [Read More](#)
- IAFI's proposal for streamlining spectrum allocation for VSAT services to avoid delays in service launches. The letter emphasized the need for continuity under existing guidelines until new rules under the Telecom Act are finalized. [Read More](#)
- During the 4th ISMC-24 organized by the IAFI, Prof Raul Kartz, President Telecom Advisor services, LLP, USA and Prof University of San Andres, Argentina explained the economic value of lower 6 GHz Wi-Fi spectrum, 5925-6425 MHz. [Read More](#)
- ITU/APT Foundation of India (IAFI) organized 4th India Spectrum Management Conference 2024 (ISMC-24) was held from 7-8 Nov, 2024 at Hotel Le Meridien, New Delhi. Event served as the prominent forum for in-depth analysis of key issues related to [Read More](#)
- ITU/APT Foundation of India (IAFI) in response to a TRAI Consultation Paper submitted comprehensive response regarding the ongoing consultation paper on Telecom Commercial Communication. IAFI emphasized the need to expand the framework scope to prevent SCAM Communication. [Read More](#)
- In response to TRAI Consultation Paper on service authorization granted under new Telecom Act, 2023, IAFI vehemently opposes the proposed amalgamation of the GMPSCS and VSAT authorization and said that these two authorization should remain separate as [Read More](#)
- IAFI calls for Delicensing of Captive 5G networks under Service Authorisations to be Granted Under the Telecommunications Act, 2023. [Read More](#)
- Bharat Bhatia, President, IAFI in a press release applauded TRAI for releasing a consultation paper on spectrum auction, in millimeter bands 37-37.5 GHz, 37.5-40 GHz, and 42.5-43.5 GHz bands, seeking comment from the stakeholders, for future 5G deployment and ensuring reliable and widespread 5G coverage in sectors like healthcare, robotics, and industry 4.0. [Read More](#)
- A new Task Force dedicated to address the challenges and opportunities in developing and standardizing 6G technology, to focus on enhancing India's participation in the ITU IMT-2030 framework. IAFI welcomes participation from industry, academia, research institutions, and standards development organizations in ubiquitous and affordable connectivity, support development of telecom and semiconductor manufacturing ecosystem, thus India taking lead in 6G Technology ecosystem and services. [Read More](#)
- IAFI urges Department of Telecom for urgently delicensing the frequency band 5925-6425 MHz for the use of Wi-Fi to support India's local manufacturing innovation and export make in India products. Considering the importance of the Wi-Fi in 6 GHz band, many major economies like USA, Canada, France, Germany, UK, Singapore, UAE etc, have already deployed Wi-Fi 6e (5925-6425 MHz). [Read More](#)
- During the "National Workshop on Learnings from WRC-23 and the way forward, planning for WRC-27 and forthcoming ITU and APT meetings", organized by IAFI at Hotel Hyatt Centric, MG Road, Bangalore, Chief Guest and the Member (Technology) announced that the Department of Telecommunications (DoT) will soon initiate studies on the Citizens Broadband Radio Service (CBRS). The studies will also address potential 5G coexistence issues with Aircraft Radio Altimeters. [Read More](#)
- DoT to resolve 5G coexistence with radio altimeters, start studies on CBRS. Official [Read More](#)
- IAFI has urged the Department of Telecommunications (DoT) to expedite the assignment of satellite spectrum without any further delay. This is to prevent potential service launch delays for VSAT and other satellite operators operating under a unified license. IAFI emphasizes that such assignments should be processed promptly under existing guidelines, without waiting for the issuance of rules under the telecom act. [Read More](#)
- In the 45th meeting of WP5D of the ITU-R in Geneva (January 31 to February 7, 2024), a proposal was approved to create a global report on mobile technologies for financial inclusion. The report will include insights from India's experience with UPI payments. IAFI emphasized UPI's robust security, reliability, and speed, underscoring its crucial role in promoting financial inclusion and driving economic growth. [Read More](#)
- IAFI has urged the Department of Telecommunications to promptly process applications for the assignment of satellite spectrum, specifically for VSAT and similar services authorized under unified licenses. The request aims to prevent any delays in the launch of services by VSAT and other satellite operators, emphasizing the importance of adherence to existing guidelines. [Read More](#)
- The first national preparatory workshop for the World Telecommunication Standardization Assembly (WTSA-24) was organized by the Telecom Engineering Centre of the Department of Telecom and IAFI. The workshop focused on key topics such as the structure and organization of WTSA, review of existing resolutions, and proposals for new resolutions in the field of telecommunication standardization. [Read More](#)

Links to our Activities & Programmes

- Letter to Principal Secretary to the Prime Minister of India, Shri P K Mishra for PMO Support needed for Innovation and Local Manufacturing
- Hon'ble Minister of Communications and Development of North Eastern Region, Government of India Request for IAFI's recommendation for Delicensing of Captive 5G networks under Service Authorisations to be Granted Under the Telecommunications Act, 2023.
- Letter to Hon'ble Minister for Communications and Railways Request for industry consultation on Draft Telecommunication Rules, 2023
- Letter to Secretary, Ministry of Power Request for implementing Green Open Access Rules for the Telecom Sector in States/UTs
- Letter to Secretary DoT & Chairman DCC Request for further extension of implementation of MTCTE
- Letter to Secretary DoT & Chairman DCC Clarification for import of NGSO Satellite Devices under MTCTE
- Letter to Secretary DoT & Chairman DCC Assignment of Spectrum for Satellite Communication Services
- Letter to Secretary DoT & Chairman DCC Request for Urgent Intervention in Equipment Theft Cases
- Letter to Hon'ble Minister for Communications and Railways, Government of India Urgent need for WRC-23 follow up actions on 6GHz Band-Delicensing of 5925-6425 MHz is key to support innovation and make in India
- Letter to Secretary DoT & Chairman DCC Rationalization of Spectrum Usage Charges (SUC) pertaining to Satellite Communications
- Letter to Secretary DoT & Chairman DCC Assignment of Spectrum for Satellite Communication Services
- Letter to Secretary DoT & Chairman DCC Suggestions for formulation of a new Policy for Spectrum Swapping

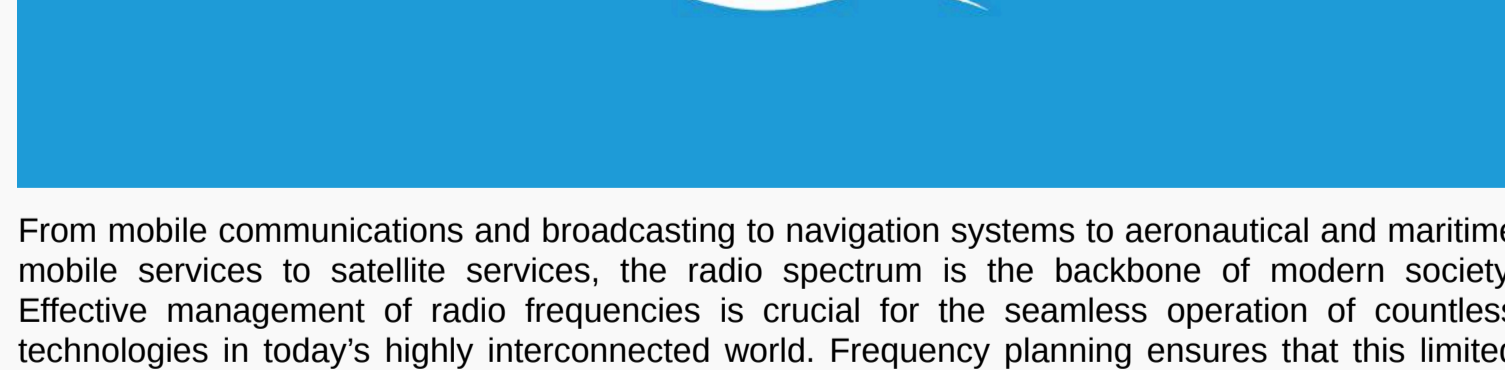
IAFI MEMBERSHIP

ITU/APT Foundation of India (IAFI) is a non-profit, non-political, non-partisan industry foundation registered as a society under the Societies Registration Act, 1960. IAFI has been working for the last 20 years with the prime objective of encouraging the involvement of professionals, corporate, public/private sector industries, R&D organizations, academic institutions, and such other agencies engaged in the development of the Indian Telecom sector. The members of IAFI are corporate members are 28 and individual members to 125 making a total of 153 members. The IAFI also emphasized on the Creation of a new member category for academia and a campaign to register Eminent educational institutes as members.

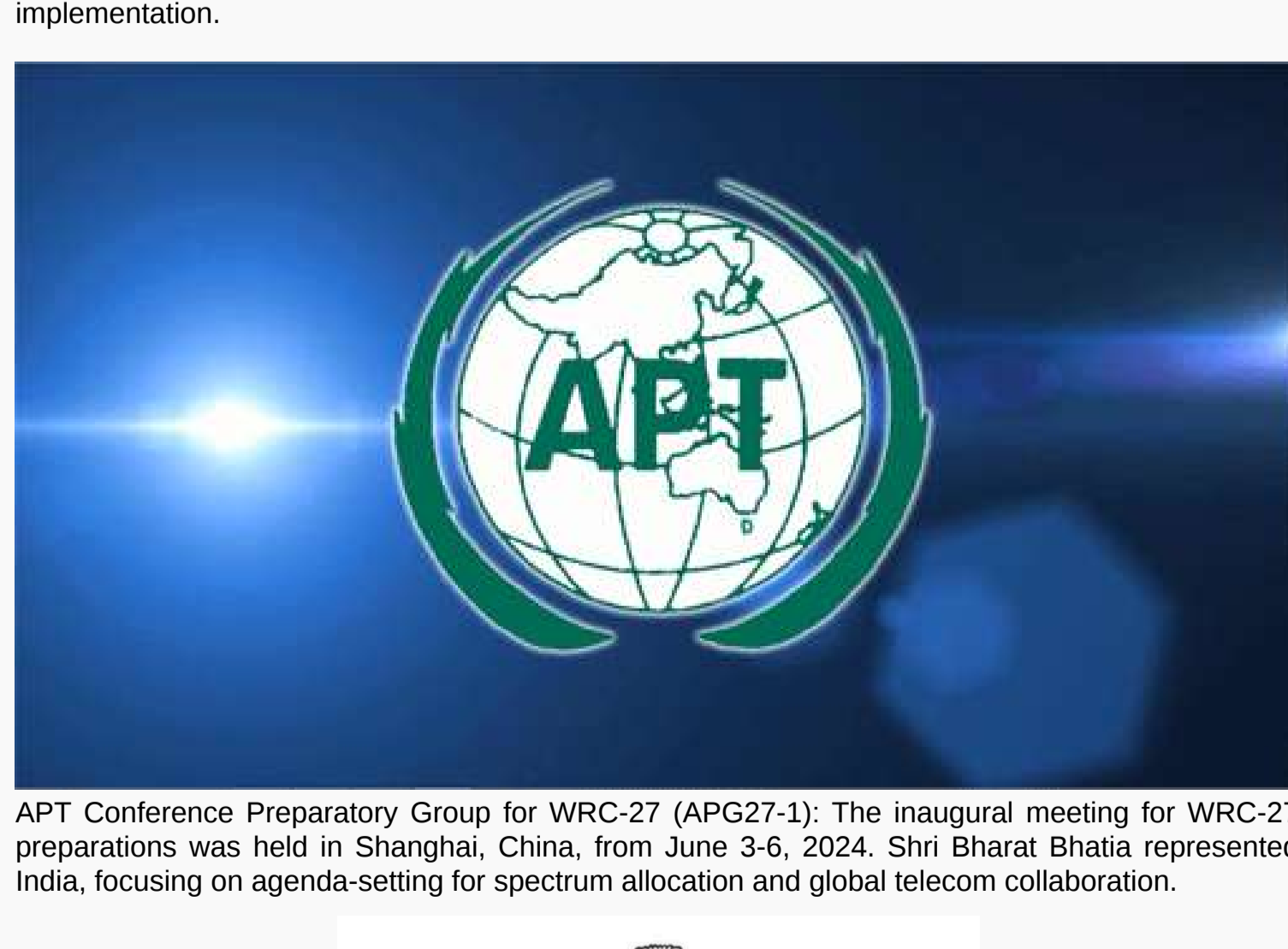
The benefits provided to the members include an invitation to all the events of the Foundation which include: Training programs, seminars, workshops, etc. conducted by the society on a complimentary basis. Besides, EC Members will also have access to information related to ITU and APT and other telecom journals where members can subscribe. Members are further eligible to participate in ITU-T, ITU-D, and APT activities. The individual Membership Fee of IAFI has been revised to the previous fee that was applicable since the beginning. Please click: [Membership details](#)



Partners Association

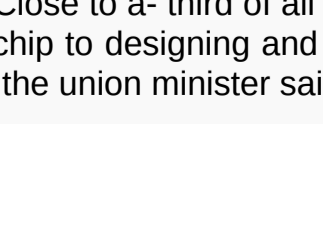


Activities in our focus areas during August 2024

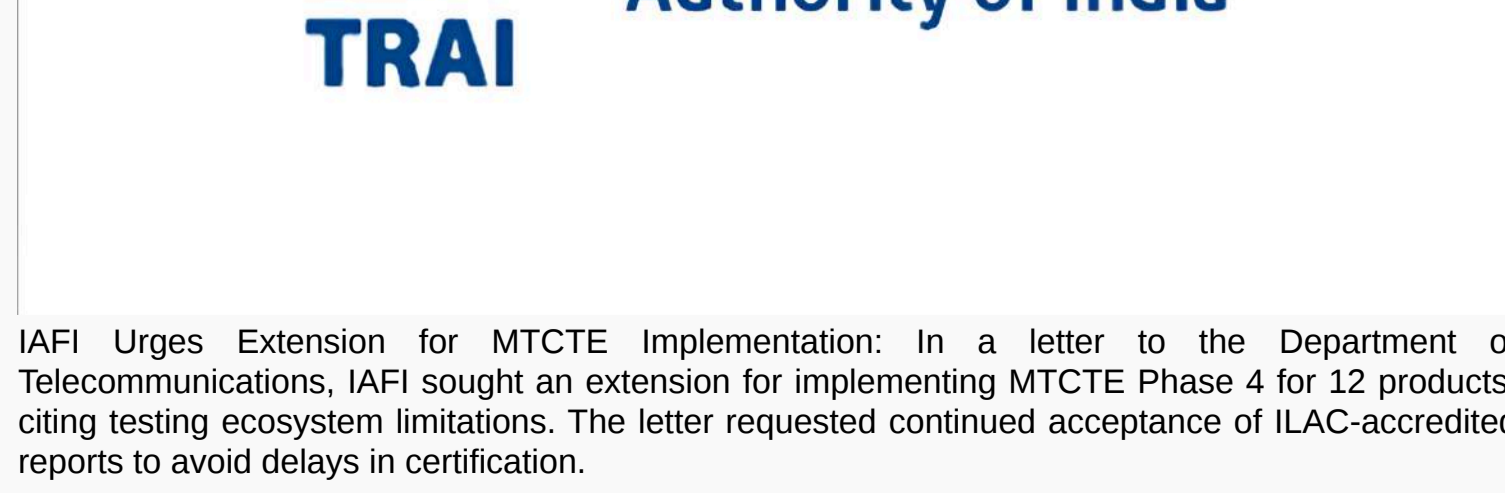


From mobile communications and broadcasting to navigation systems to aeronautical and maritime mobile services, the radio spectrum is the backbone of modern society. Effective management of radio frequencies is crucial for the seamless operation of countless technologies in today's highly interconnected world. Frequency planning ensures that this limited and valuable resource is shared efficiently and equitably among countries and radio services worldwide. To support radiocommunications regulators, the International Telecommunication Union (ITU) held a three-part series of regional workshops on this vital aspect of Radio Regulations implementation.

APT Conference Preparatory Group for WRC-27 (APG27-1). The inaugural meeting for WRC-27 preparations was held in Shanghai, China, from June 3-6, 2024. Shri Bharat Bhatia represented India, focusing on agenda-setting for spectrum allocation and global telecom collaboration.



सत्यमेव जयते
Department of Telecommunications
Ministry of Communications
Government of India



IAFI Urges Extension for MTCTE Implementation: In a letter to the Department of Telecommunications, IAFI sought an extension for implementing MTCTE Phase 4 for 12 products, citing existing operational challenges. The letter requested continued acceptance of ITAC-accredited reports to avoid delays in certification.