



## Call for Papers

### Global Nexus: Universal Communications, Intelligence & Sustainability

### 52<sup>nd</sup> Wireless World Research Forum

King's College, London, UK  
10-12 September 2024

The key three pillars of next-generation mobile communication networks are sustainability, universal communications (in terms of both connectivity and digital inclusion), and network intelligence. Within that context, new types of capabilities are anticipated through native network intelligence, the tight integration of sensing functionalities and a commitment to sustainability. These key pillars of beyond 5G networks create an exciting albeit challenging field of research with the potential to significantly impact not only our everyday daily lives but a diverse set of industries. To this end, the emerging efforts towards the definition and initial steps towards the standardization of the next-generation wireless networks aim to integrate terrestrial, aerial, and satellite systems to ensure a truly seamless, global coverage in a unified manner in terms of terminal and overall end-user experience. Next generation networks will leverage advanced distributed intelligence, enabling real-time data processing and real-time decision-making, enhancing both personal and industrial applications. Sustainability is also at the forefront, with green technologies and energy-efficient protocols designed to minimize the environmental footprint in the era of climate crisis and net-zero commitment across different industries. Consequently, a complex ecosystem of networks, interconnected applications, services, and physical/virtual devices, with a high degree of heterogeneity, emerges. This heterogeneity is envisioned to be tamed by native network ML/AI solutions that must display significant levels of autonomy in terms

of their operation as well as ensuring a safe, secure, and explainable operation. Together, these advancements in **connectivity**, **intelligence**, and **sustainability** will drive the future of communication, making next generation networks a truly transformative force in our interconnected world.

Under this theme, the 52<sup>nd</sup> Wireless World Research Forum (WWRF) will take place at King's College London, in London, UK from 10-12 September 2024. You are invited to be part of designing the wireless future by joining us for three days of insightful discussions, presentations, innovative brainstorming, and expert-level networking.

### Topics of interest

Authors are invited to submit original manuscripts aligned with the theme of the event, on one or the more of the following topics, or on any relevant subject relating to intelligent and sustainable communications for a better world:

- 6G, Use Cases, Enablers, KPIs, KVIs
- Autonomous communications
- Towards automated wireless communications
- Resource sustainability in future communications
- Cutting-edge solutions for sustainable communications
- Openness, disaggregation, modularity and programmability
- Intelligent applications for vertical industries
- Data analytics, AI, and machine learning for sustainability and network automation
- Software-defined infrastructures
- Advanced radio technologies
- Tactile Internet
- Green communications and networking
- THz communications
- Bridging the digital divide beyond 5g
- Beyond-5g technologies
- Innovations in business models for wireless networks
- Cyber-physical systems and networks
- Privacy and security
- Connected vehicles
- Holographic MIMO & reconfigurable intelligent surfaces
- Applications and impact of quantum-based technologies
- Semantic communications
- Spectrum issues and regulatory principles
- Social network-aware wireless
- Internet of Things and wearable technologies
- Quantum communications

Authors are expected to be physically present at the meeting to present their contribution.

### Submission Instructions

Contributors should submit an extended abstract by 31 July 2024 to [contributions@wwrf.ch](mailto:contributions@wwrf.ch) for review. Extended abstracts should be preferably at least two pages in length, either in plain ASCII text, MS Word or Adobe PDF. A template for abstracts or papers is available. Full papers must be prepared using the WWRF template. The following list shows the different working groups (WGs) and Vertical Industry Platforms (VIPs) to one of which the contributions should be directed:

- WG A/B - User Needs & Requirements, Services and Devices in a Wireless World
- WG C - New Directions in Communication Architectures and Technologies, including SDN, NFV and MEC
- WG D - Radio Communication Technologies: Air Interfaces for 6G, advance wireless access techniques, MIMO, Reconfigurable Intelligent Surfaces, Radio Resource Management, SDR and Spectrum Sharing

- WG BM - Future Business Models supported and enabled by 5G and Beyond wireless technologies
- WG HF - High-Frequency Technologies: mm Wave and THz Communications and Sensing
- VIP WG Digital Health
- VIP WG Connected Vehicles
- VIP WG Track-to-Train communications
- WG Cybersecurity
- WG 6G

## Publication

Selected papers will be published in the newly-launched WWRF journal Wireless World Research and Trends (WWRT)

## Important Dates

Abstract Deadline:	31 <sup>st</sup> July 2024
Notification of Acceptance:	8 <sup>th</sup> August 2024
Early registration:	22 <sup>nd</sup> August 2024
Final paper and Copyright Licence Submission:	3 <sup>rd</sup> September 2024
Event:	10 <sup>th</sup> -12 <sup>th</sup> September 2024

## Copyright Licence

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Contributions submitted without a completed and signed copyright licence cannot be published in the meeting proceedings or in WWRF's other publications. Abstracts do not require a copyright licence.

## Student Grants

Funding is available to support a number of students travelling to and presenting papers at the meeting. Application for student funding must be provided with paper submission. The level of grant will depend on available funds and the student's country of residence. Priority will be given to students from member organizations.

## IMPORTANT DOCS

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# WIRELESS WORLD RESEARCH FORUM

