MiFuture News

Industry news, papers and events related to 6G C MIMO

July 2025

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MiFuture News: Monthly Updates on 6G and MIMO Technologies

MiFuture News is a monthly publication of the MiFuture project, complementing the MiFuture Newsletter, which will be published every six months. While the Newsletter includes internal project updates, MiFuture News features articles and information from external sources freely available on the internet.

This publication aims to gather the most interesting industry news, relevant technical papers, and upcoming events related to 6G and MIMO technologies to share with supervisors and PhD students within the project.

If you come across any interesting news, please share it with us for inclusion in the next issue.

Union Minister Shri Jyotiraditya M. Scindia Reviews Bharat 6G Alliance Progress

July, 10 - The Union Minister of Communications, Shri Jyotiraditya M. Scindia today reviewed the progress of Bharat 6G Alliance (B6GA) along with Shri (Dr.) Neeraj Mittal, Secretary, Telecom. During the high-level interaction, the Alliance presented detailed updates on India's progress toward becoming a global leader in 6G by 2030. The event included comprehensive presentations from working group Chairpersons, outlining actionable plans and key technological advancements.

Cabinet approves NT$27 billion project targeting commercial 6G by 2030

July, 10 - Taipei, July 10 (CNA) The Cabinet on Thursday approved a six-year, NT$27 billion (US$923.85 million) project aimed at launching commercial 6G wireless services by 2030 and strengthening Taiwan's role in the next-generation communications supply chain.

6G Rollout Will Be A Patchwork At First

July, 8 - Spectrum allocation, infrastructure development, and varying use cases will affect when and where this technology rolls out.

5G Americas Spotlights ISAC's Role in 6G Mobile Networks, Smart Infrastructure

July, 7 - As the wireless industry prepares for the evolution to 6G, 5G Americas, the voice of 5G and beyond for the Americas, announced the publication of its latest white paper, Transforming Industries with Integrated Sensing and Communication.

SoftBank makes 6G inroads with 7GHz trial

July, 8 - SoftBank Corp teamed up with Nokia to complete an outdoor trial using 7GHz spectrum, a centimetre-wave frequency under consideration for 6G technology, in a move it claimed was a first for a telecoms operator in Japan.

First HF filter using XBAR targets for 5G, Wi-Fi and 6G

July, 9 - Murata Manufacturing is mass-producing and shipping what it claims is the first high-frequency filter utilising XBAR technology.

China develops first 6G electronic warfare technology: a system that could annihilate radars in seconds

July, 4 - China is making it clear it doesn't intend to sit on the sidelines. In a fresh push for technological dominance, Beijing has unveiled what it claims is the world's first publicly developed electronic warfare system powered by 6G technology.

5G-A bridge to new telecom, industry era

July, 7 - Improved solution provides a glimpse of even-faster 6G; to drive industrial transformation with AI for better connectivity and more innovation.

6G-REFERENCE: Targeting low complexity and power to enable 6G sustainable networks in urban areas

July, 9 - 6G-REFERENCE will contribute to the European leadership in microelectronic solutions for 6G communication and sensing infrastructure by developing hardware enablers for densified cell-free deployments.

The 6G train has left the station

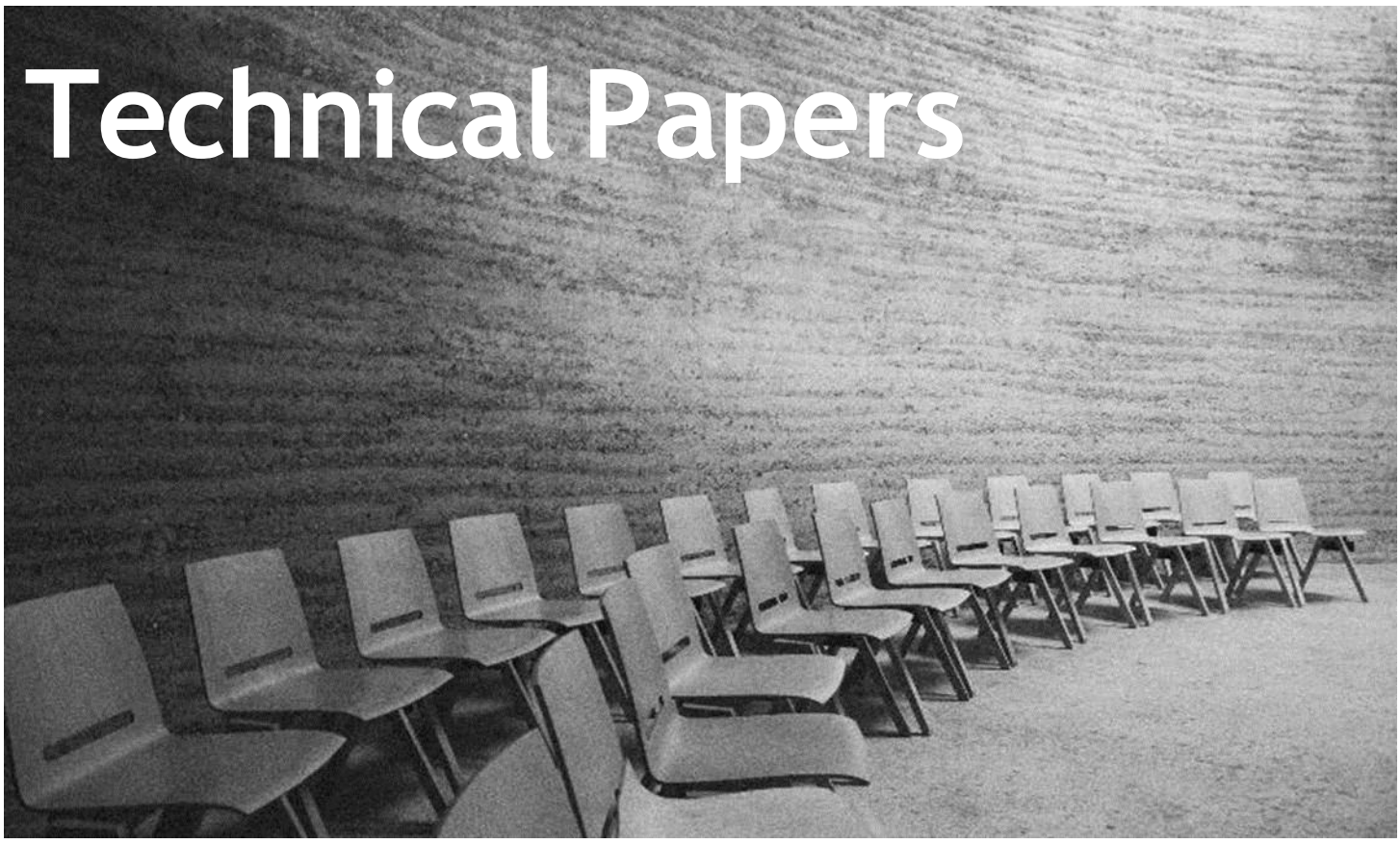
June, 13 - After years of intensive research, 3GPP took the first concrete steps to make 6G a reality this week in Prague at its technical specification group (TSG) meetings. The 3GPP Radio Access Networks (RAN) and System Architecture (SA) plenaries commissioned detailed studies on both 6G radio and 6G system architecture.

Telco giants call for seamless move to 6G, says the technology must learn from 5G mistakes

June, 16 - Some of the industry's biggest telco companies have called for harmonized 6G standards, through the Next Generation Mobile Networks Alliance (NGMN). Ahead of the 3GPP's Release 20, NGMN has this week released a report calling on the standards body 3GPP to ensure the transition to 6G is seamless.

ETRI demonstrates 6G communication, uniting terrestrial and satellite networks

July, 8 - Korean researchers unveil groundbreaking 6G technology for seamless connectivity and advanced mobility services.



6G KEY MESSAGES

NGMN Alliance

As 6G standardisation progresses at 3GPP, the NGMN Alliance (NGMN) presents the consolidated view of mobile network operators (MNO) globally highlighting a unified and strategic vision for future network generations. This document consolidates key messages from NGMN as an operator view perspective, ensuring alignment, readiness, and a strong presence covering major 3GPP milestones. It serves as a foundation for engaging with the broader industry, driving collaboration, innovation, and strategic direction in the evolving 6G landscape by considering benefits of end-customers.

Large Language Models in the 6G-Enabled Computing Continuum: a White Paper

Lovén, L., Bordallo López, M., Morabito, R., Sauvola, J. & Tarkoma, S. (Eds.) (2025). University of Oulu

The evolution towards 6G architecture will shift communication networks, with artificial intelligence (AI) playing a key role. This white paper examines the integration of Large Language Models (LLMs) within 6G systems. Their ability to grasp intent, reason, and plan, and execute commands will redefine network functionalities and interactions. An essential component is the AI Interconnect framework, designed to facilitate AI operations within the network. Building on the evolving state-of-the-art, we present a new architectural perspective for the next generation of mobile networks. Here, LLMs will work together with pre-generative AI and machine learning (ML) algorithms. This union combines old and new methods, merging established approaches with AI technologies. We provide an overview of this evolution and explore the applications arising from such an integration. We envisage an integration where AI becomes central to future communication networks, offering insight into the structure and function of a 6G network centered on AI.

CONTRIBUTION TO ITU-R WORKING PARTY 5D LIAISON STATEMENT TO EXTERNAL ORGANIZATIONS MINIMUM REQUIREMENTS RELATED TO TECHNICAL PERFORMANCE FOR IMT-2030 RADIO INTERFACE(S)

Ericsson, Nokia, Orange, Telefónica, TIM 1, ITU Communications Study Group

This contribution is based on activities of the Smart Networks and Services Joint Undertaking (SNS JU) and the 6G Smart Networks and Services Industry Association (6G-IA) as the representative of the private side in the Joint Undertaking. The SNS JU is partly funded by the European Commission. This contribution complements the contribution Document 5D/553 presented in ITU-R WP 5D meeting #48 (4-13 February 2025), were a definition, background information and justification were provided for each capability item of the Recommendation ITU-R M.2160.

6G IA POSITION PAPER: FP10 and Beyond SNS

6G SNS - IA

This paper outlines a long-term perspective for Smart Networks and Services (SNS) in Europe, taking a time perspective spanning across the FP10 implementation time frame. The structure of the paper covers three interrelated aspects: Why a long-term European extended R&D perspective is needed for SNS, What activities should be covered within the FP10 time frame, & How the proposed set of activities should be implemented to maximise impact. These views provide a rationale for further expanding European support for the SNS technology domain in the FP10 time frame, building on the proven track record of success over the last 30 year. This paper represents the views of the 6G Smart Networks and Services Industry Association (6G-IA), who is the private side of the Smart Networks and Services Joint Undertaking (SNS-JU) launched in November 2021 under the current Horizon Europe programme.

6G Empowering Future Robotics

One 6G Association

The one6G Association highlights the growing demand for robotic applications across sectors like healthcare, logistics, smart cities, and manufacturing. It envisions 6G systems empowering robotics through integrated wireless sensing, communication, and AI, enhancing efficiency and reducing costs. The white paper explores use cases such as remote surgery, precision agriculture, and space exploration, analyzing the system requirements across sensing, connectivity, and edge computing. It outlines new 6G features, enabling technologies, and architecture impacts, while addressing ethical, privacy, and sustainability concerns. It also emphasizes the need for multidisciplinary research and standardization to ensure interoperable and effective 6G-powered robotic systems.


Events


DGAIW 2025
ICDCS 2025 International Workshop on
Distributed Generative AI for Wireless (DGAIW)
45th IEEE International Conference on Distributed Computing Systems (ICDCS)
20 July - 23 July, 2025 Glasgow, Scotland, UK
Host Conference: ICDCS 2025


Join Japan's hub of Optical Communication and Wireless Network!
COMNEXT
Next Generation Communication Technology & Solutions Expo
July 30[Wed] - Aug. 1[Fri], 2025
Tokyo Big Sight, Japan

The 34th International Conference on Computer Communications and Networks (ICCCN 2025)
August 4 - 7, 2025, Tokyo, Japan
ICCCN 2025 is Technically Co-Sponsored by the IEEE and IEEE Communication Society


ICCCN 2025 Tokyo, Japan

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