

## ?? FUWIRI gets coveted status and more funding to 6G research infrastructure

### Description



The Future Wireless Research Infrastructure (FUWIRI) has been awarded prestigious status, placing it among Finland's most critical research infrastructures for 2025-2028. This designation, granted by the Research Council of Finland, highlights FUWIRI's vital role in pushing the boundaries of 6G and future wireless technologies.

From among the key research infrastructures, the Research Council's FIRI Committee selected six research infrastructures as Majakka ("lighthouse") infrastructures. This status is granted to research infrastructures that have been the most successful in the roadmap call and lead the way in all key infrastructure areas, such as service provision, impact, functionality, and shared use. The University of Oulu is involved in five of the six that have received the status and leads FUWIRI. This is a significant achievement.

The status signifies FUWIRI's importance to both scientific advancement and Finland's global competitiveness. It also brings with it prioritised funding, including a share of the Research Council of Finland's €130 million infrastructure allocation. This will enable FUWIRI to significantly expand its experimental facilities, particularly those focused on next-generation wireless networks.

## Leading innovations in wireless technology

Established in 2020, FUWIRI has rapidly become a leading platform for wireless innovation. Its research focuses on the sub-terahertz (sub-THz) frequencies, above 100 GHz, crucial for developing 6G networks capable of delivering unprecedented speed and low latency. The potential applications are vast, spanning autonomous transport, advanced healthcare, and smart manufacturing.

Beyond frequencies, FUWIRI is integrating artificial intelligence (AI) and machine learning (ML) to optimise network performance, developing Open RAN (O-RAN) architecture for more flexible and cost-effective networks, and achieving high-precision positioning and sensing critical for applications like remote surgery and autonomous vehicles. Research into network digital twins and the interface between quantum computing and wireless networks further positions Finland at the cutting edge of future technology.

## National collaboration secures Finland's leadership in 6G development

FUWIRI's success is built on a strong collaborative foundation, uniting leading Finnish institutions. Led by the University of Oulu and its Centre for Wireless Communications (CWC), the initiative also brings together expertise from Tampere University, Aalto University, and VTT Technical Research Centre. "The Majakka status enhances our ability to drive advancements in wireless technology and strengthens Finland's research capabilities," says Professor Ari Pouttu, University of Oulu.

This national collaboration is key to FUWIRI's ambitious goal: developing a fully integrated 5G-6G testing platform by 2030. Achieving this will significantly contribute to Finland's role in shaping future global wireless standards. By operating on an open-access model, FUWIRI fosters collaboration with research institutions, industry partners, and international initiatives, ensuring its research has a global impact.

---

*Originally published on 4 February by [6G Flagship](#).*

***Announcements are published as a service to readers. The sender is responsible for all content.***

***Announcements for publication can be submitted to [in\\*\\*@ar\\*\\*\\*\\*\\*.com](mailto:in**@ar*****.com).***

### Category

1. Announcements

### Date Created

2025/02/06

### Author

elias

---