The Horizon Europe project 6G-LEADER

6G AI-Driven RAN Optimization for Enhanced Performance and Efficiency

6G LEADER

- Redefining next-generation wireless communication
- Exploring advanced AI/ML-based solutions, intelligent RAN control, and semantic-driven networking
- Creating an energy-efficient, high-performance, and resilient 6G ecosystem
- Unlocking secure, ultra-reliable, and low-latency connectivity for industries, enterprises, and communities worldwide
- Validating key innovations through real-world Proofs of Concept (PoCs) in large-scale testbeds.

POWERED BY

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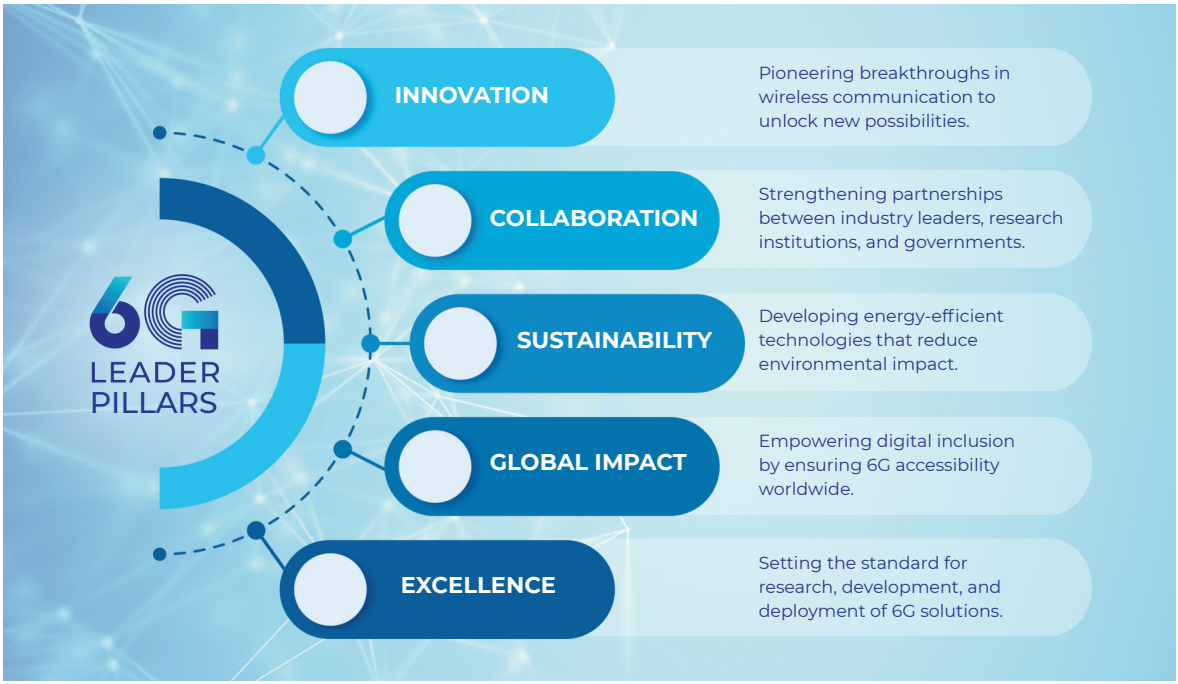
OUR MISSION

To drive the development and implementation of 6G technology, enabling smarter, faster, and more sustainable connectivity solutions worldwide.

OUR VISION

To be at the forefront of 6G innovation, creating a connected future that fosters global collaboration, inclusivity, and technological advancement for all.



6G-LEADER PROOFS OF CONCEPT

Real-world validation: 6G-LEADER is demonstrating its innovations through five PoCs across Europe, testing:

- AI-driven RAN optimisation for enhanced performance
- Advanced antenna concepts like Fluid Antennas & Reconfigurable Intelligent Surfaces
- Energy-efficient and sustainable 6G solutions
- Semantic networking for smarter, context-aware communications.

The PoCs are deployed in large-scale testbeds across the UK, Italy, and Spain, ensuring impactful real-world validation of 6G advancements.