



///Technical Issue

Networks and wireless technologies have room for optimization due to human operations, use cases, and environmental impacts.

---Technology

- ① Realizing use case feasibility and potential from various mobile network perspectives.
- ② Over 100 Gbps transmission in the sub-terahertz band.
- ③ AI optimization of IQ signal mapping and equalization.
- ④ Virtual reproduction of radio for 6G evaluation.

---Applicable Business

Creation of use cases that explore new possibilities for robots, machines, and virtual spaces using AI in the information and communication industry. Focusing on human interaction and communication methods, we pursue entirely new user experiences, such as transmitting the five senses and telepathy, targeting around 2030.

///Research Goal

- We optimize networks and enhance quality with mobile, wireless, and AI.
- Virtual trials and real-world 6G provide low-latency, high-speed communication.

---Novelty

- ① Collaborating with experts, we pursue a network where humans, AI, and robots maximize their potential.
- ② Achieved the world's first real-time transmission over 100 Gbps in the 120–140 GHz band.
- ③ Up to 30% throughput improvement over standard 5G.
- ④ Enables quick feedback on radio wave visualization and advanced technologies' impact.