ZONE 3 Beyond 5G Development Technology Exhibition

Through panel displays, videos, and actual devices, we will showcase the current state of technologies under development and future prospects developed by the Beyond 5G Fund Projects, etc. of the Ministry of Internal Affairs and Communications and NICT.

All-Photonics Network Common Infrastructure Technology

NTT, KDDI, Fujitsu, NEC, Rakuten Mobile

As a foundational information and communication infrastructure supporting the future AI-driven society, we aim to realize an All-Photonics Network (APN) with low latency, high capacity, and low power consumption. By enabling flexible use of cloud computing resources, this network is expected to accelerate the development and utilization of AI.

Energy Saving for Wireless Base Station Utilizing AI and NTN

NICT

We are working on research and development of energy-efficient power management technologies for wireless base stations based on pedestrian flow analytics results, infrastructure conditions, and other factors.

Only Now, Only Here, & Only for You - Digital Twin service Realization Technologies -

NICT

We are engaged in research and development aimed at utilizing cyber space services for the high-resolution synchronized observation of 'ultra-instantaneous' events at remote locations, using millimeter-wave and terahertz ultra-spot wireless communication combined with spatiotemporal synchronization technology — 'Only now, only here, only for you'

Wireless Communication Technologies for Marine IoT System

Kyushu Institute of Technology, Panasonic Holdings

We are conducting research and development on communication technology to enable an "IoT environment" where various devices and sensors are connected to the Internet, both underwater and undersea.

Wireless communication technology with drones outside the cellular phone area

NICT

We are developing wireless communication technology for safe and secure operation of air mobility, mainly for drones and other aerial vehicles that are used at disaster sites, deep in the mountains, and at sea, where cell phones cannot reach many areas.

Future Ultra-Wide Area Communications Connected by HAPS, the Flying Base Station

Space Compass, NTT DOCOMO, NTT, SKY Perfect JSAT

We are engaged in research and development to realize mobile networks in remote islands, mountainous areas, and other areas where it is difficult to establish communication areas using HAPS (High Altitude Platform Stations).

Three-Dimensional Space Communication Networks Connecting Space, Air, Sea, and Ground

NICT

We are working on research and development to realize a three-dimensional space communications network that seamlessly connects various communication platforms such as multiple satellites, high-altitude platform stations (HAPS), drones, and ships via radio waves and optical links for Beyond 5G.

Space Weather Forecast for supporting stable communications

NICT

We are developing technologies to provide users with easy-to-understand information on space weather phenomena, such as solar flares, that affect low earth orbit satellites and ground/satellite communications, which are indispensable for non-terrestrial networks (NTN).

NICTER: Real-time Cyber Attack Observation and Analysis System

NICT

NICTER (Network Incident analysis Center for Tactical Emergency Response) is an integrated system for real-time observation and analysis of indiscriminate attacks on the Internet. By analyzing communications observed by NICTER, we can identify attack trends, uncover new threats, and devise countermeasures. Human Augmentation and Space Creation-based Remote Collaboration Support Infrastructure

U-Tokyo, TOPPAN

Researchers are engaged in research and development aimed at creating a support platform that enables real-time collaboration through three-dimensional spatial information transmission. This allows for the sharing of spatial information as if one were physically present at a remote site.