

Creating a Safe and Secure Society

We share our customers' ideas and thoughts toward building a safe and secure society, and engage those ideas and thoughts in creating products befitting Hitachi Kokusai Electric.

A high-speed wireless long-distance system that connects afflicted districts

SINELINK®5G is a 5-GHz band wireless communication bilateral system that achieves maximum actual throughput of 35 Mbps + 35 Mbps.

The recent Great East Japan Earthquake and subsequent damage caused by tsunami resulted in damage to a number of base stations for mobile telephony and optical fiber lines connecting those stations, thereby disrupting communications.

Telecommunication carriers then requested our SINELINK®5G to quickly restore the communications infrastructure of the afflicted areas. In an urgent action, our relevant group members organized as one unit delivered the products to the afflicted areas. Our system relayed the communication lines from the undamaged base stations to particularly the refuge areas, thereby helping to restore the communication in the Tohoku coastal region. Establishing the broadband lines that use the features of wireless communications, we significantly contributed early restoration of the communications infrastructure to the afflicted areas.

* SINELINK® is a registered trademark of our company.



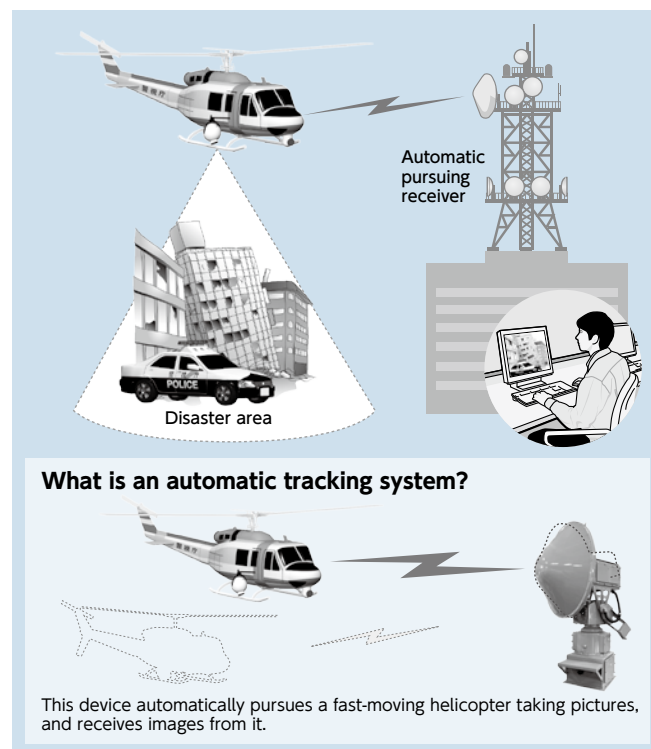
SINELINK®5G that connects the base stations
©Softbank Mobile Corp.



Support of afflicted areas by a helicopter TV system

The automatic tracking system for digital helicopter TV system that we delivered to each police headquarters through the National Police Agency is receiving clear images on the ground of the disaster as photographed from helicopters, thereby helping to monitor the extent of the disaster on a real-time basis and engage in rescue activities. Most conventional devices owned by the National Police Agency had been the analog systems, and the recent high definition digitalization made the images clearer. Our products that employ this automatic tracking system and digital modulation/demodulation system make it possible to produce stable high-definition images from fast-moving helicopters, thereby helping to properly monitor current conditions and engage in speedy rescue activities.

■ Outline structure of a typical helicopter TV system



Voice



Masaaki Inage

Communication Service Division
Hitachi Kokusai Electric Service Inc.

I saw residents at the refuge center in Onagawa, Miyagi Prefecture, waiting for the installation work to be completed, with their mobile phones in their hands.

Once the line was established, I then saw some of them talking with serious expressions, some with smiles, and others shedding tears. I had mixed feelings, but felt for the first time ever that my work had helped people so much.

Voice



Takeshi Sakuma

Sales Department III
Broadcasting & Video Systems
Sales Center

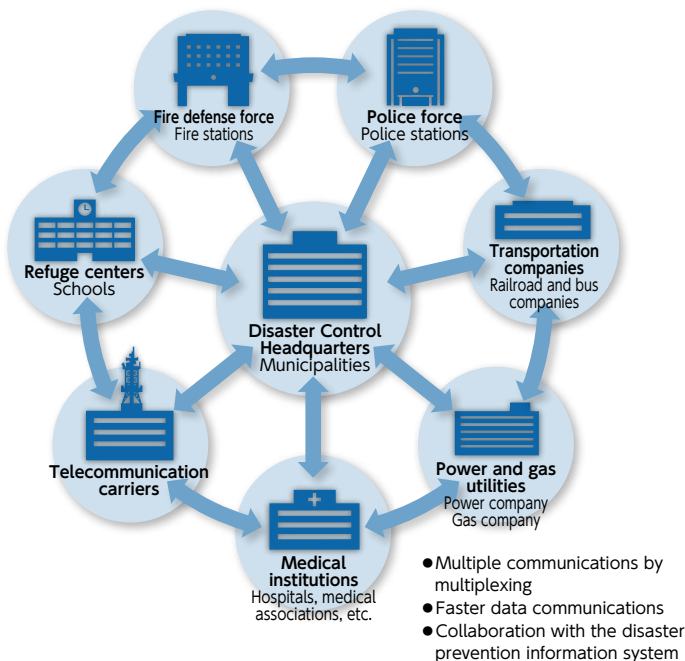
This product is suited to the initial year of police system digitization. I am very proud that the products we delivered are now being used in assistance provided for the afflicted areas. Since I come from Tohoku, the recent earthquake appeared very close to me. I intend to continue watching customer requirements promptly and engage in assistance activities.

Digital mobile system for disaster preventive administration suited to emergency communications

The digital mobile system is an advanced privately-operated wireless system that enables the disaster control headquarters to broadcast to whole, group, or to call individuals from its communication console located in a municipal building, as well as making connection to extension telephones, sending fax messages, and transmitting data. This system utilizes the advantage of the wireless license system and provides the common communication means among gas, railroad, school, hospital, and other public entities and utilities.

The great earthquake caused disconnections or restrictions on call connections on public telephone networks. However, our systems, accounting for a largest market share in terms of the number of projects since the age of analog products, helped to collect disaster information, report recovery urgently, and share those information among those responsible.

■ Digital mobile system for disaster preventive administration

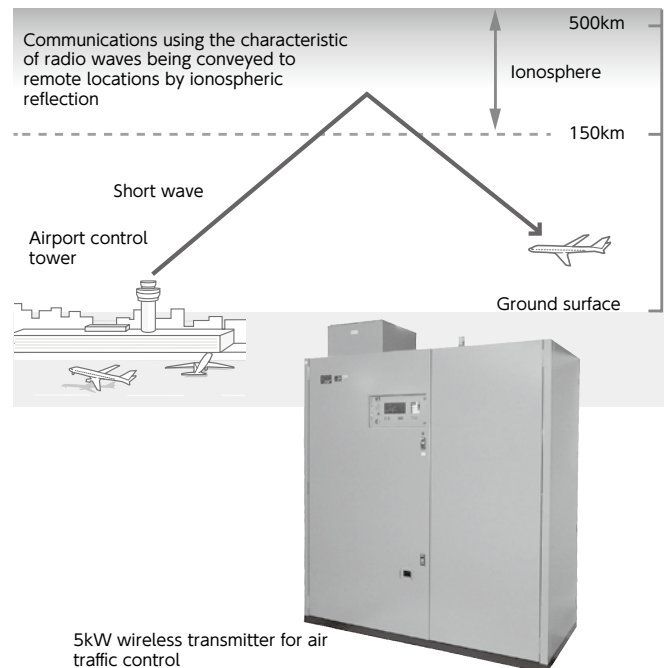


A 5kW wireless transmitter that supports safe aircraft navigation

Our 5kW wireless transmitters for air traffic control are installed around airports and other facilities, and connect aircraft flying in the Pacific Ocean area and the ground controllers at airports, Tokyo Area Control Center, and other facilities with voice communications by using short waves (HF) to support area control for aircraft flying above the sea. Short-wave communications are characterized by short waves being conveyed to remote areas by ionospheric reflection. This, together with VHF communications used for communication with aboveground aircraft and along coastal lines, is an indispensable means of communication for air traffic control.

Support for the safe navigation of aircraft requires high reliability. This device, which embodies our wireless expertise accumulated over many years, controls power consumption while increasing reliability, thereby helping to continue safe, reliable aircraft navigation.

■ Mechanism for short-wave communications



Voice



Kazuya Abe

Emergency Communication
Systems Engineering Department
Wireless Communication Systems
Engineering Center

I received a thank you call from Nakano-ku, Tokyo after the earthquake: "At the time when public phones do not work, the disaster preventive wireless system was useful and of a great help." I was impressed to realize that securing urgent communications in emergency was more helpful for municipal staff in charge than I had imagined.

Voice



Tsukasa Ishii

Engineering Department I
Hamura Works

Based on the high-power transmission technology that we had cultivated over many years, we developed a product that enhances the reliability of air traffic control and helps reduce carbon dioxide emissions by reducing standby electricity, in order to meet customer needs. To continue responding to customer needs, we intend to inherit our corporate expertise and create even better products.