

## S Building Resilient Broadcasting and Communications Infrastructure, Eliminating Digital

### Elimination of the Digital Divide, Taking Advantage of Characteristics of Satellite Communication, and Utilization of Satellite Communication in the Event of Disaster

Through wide coverage, multi-destination distribution, and mobility, satellite communication makes it possible to secure means of communication, including the internet, in areas such as mountainous regions and remote islands where terrestrial lines cannot be installed, with electric power and antenna that are capable of receiving electric waves. Through this system, what was once inconvenient becomes comfortable, and this helps to reduce digital divide among regions. Such merits are not limited in Japan. This expansion of the communication environment contributes to the elimination of disparities in areas such

as education, the economy, and technologies in the least developed countries.

Moreover, as satellite communication is not much affected by natural disasters like earthquake on the Earth and its high-mobility nature, the use of VSAT (Very Small Aperture Terminal), vehicles with Satellite News Gathering Systems, makes mobile phone services and internet communication available even in disaster-affected areas. Furthermore, satellite communication is useful in the provision of relief and medical care in disaster-affected areas in the recovery phase.



Training in utilizing emergency telecommunications provided by DCOM in November 2017



Installing satellite communication antennas in the disaster-affected areas

### Establishment of the Satellite Fleet for Enhancing the Core Profitability

We successfully launched JCSAT-17 in 2020, and along with Horizons 3e and JCSAT-1C launched from 2018 to 2019, we have completed the introduction of 3 new satellites that will contribute to improving our core profitability.

Of these, Horizons 3e and JCSAT-1C are high-throughput satellites with a communication capacity 10 times or more that of conventional satellites.

In FY 2024, we plan to launch a Superbird-9 that will become our first flexible satellite.

Going forward, we will continue to enhance our competitiveness in the market by building a fleet system that can respond flexibly to various needs through using new technologies and other means proactively.



The image of Superbird-9 satellite

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## Divide

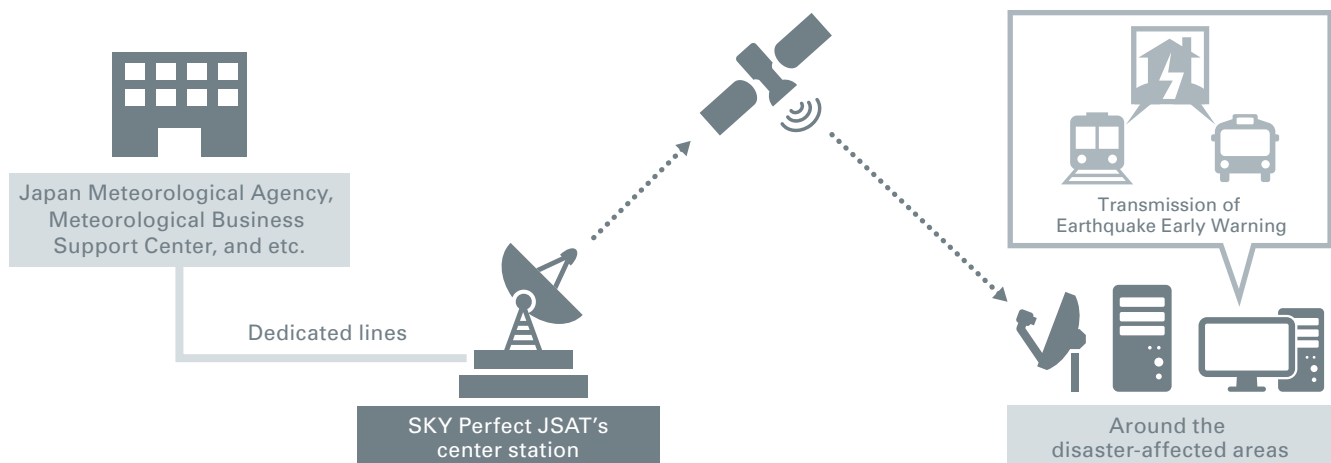


## Distribution of Earthquake Early Warning (Alert and Forecast) of the Japan Meteorological Agency via Satellite

SafetyBird, a service for satellite transmission of Earthquake Early Warning, enables warnings issued by the Japan Meteorological Agency to be received even in areas where terrestrial lines are not installed. For example, railway companies have put in place a system that receives Earthquake Early Warning via satellite and automatically notifies train drivers via the train radio system so that the drivers control the train based on their judgment in accordance with the train control standards according to the seismic intensity. Greater application of SafetyBird is expected, such as linkage with facilities inside train stations, such as the issuing of announcements and elevator control, in addition to train control.

Fully recognizing the roles and responsibilities that we are expected to fulfill during a disaster or emergency, in 2016 we acquired resilience certification\*. With the safety and security of our employees and officers and their families as our first priority, we have established the policies of working to prevent secondary disasters, minimizing effects on our stakeholders, and quickly restoring and continuing operations so as to minimize the effect on management. Under this policy, we have predetermined the operations that we will continue to perform during an emergency for each of our business areas, and we are working to develop measures while maintaining a strong awareness of business continuity plan (BCP).

System of SafetyBird, a service for satellite transmission of Earthquake Early Warning



\*Resilience certification (Certification for Organizations That Contribute to Strengthening National Resilience) is based on the notion that "Japan will overcome disasters," which was developed by the National Resilience Promotion Office in the Cabinet Secretariat. Organizations are certified as "Organizations That Contribute to Strengthening National Resilience" after their business continuity initiatives have been screened and evaluated by the Resilience Certification Office.

## Emphasis on Expansion of FTTH Retransmission Service

We provide optical fiber-based retransmission service (FTTH: Fiber To The Home) as well as satellite TV broadcast service. The optical fiber-based retransmission service enables subscribers to view terrestrial TV broadcasts, broadcasting satellite (BS) broadcasts, and SKY PerfectTV! without installing an antenna. Since September 2019, it has become possible to view all channels of new 4K/8K satellite broadcasting, including NHK's BS8K channel, via our retransmission service.

By installing a dedicated adapter, superior picture quality is available without refurbishment of the facilities at home. Our fiber-based retransmission service can cover approximately 32 million households and over 2.5 million households are already subscribing to the service (as of July 31, 2021). We will expand the FTTH retransmission service area to increase the number of subscribing households and also aim to increase the number of subscribers of SKY PerfectTV! via optical fiber.