Material Issue 1 Offering Reliable Information and Communications Services

Highlights

Recovery Support in Times of Disaster

Policy KDDI

KDDI's Approach (Recovery Support in Times of Disaster)

When a disaster happens, many people try to use their phones to check on the safety of family and friends or for relief activities in the disaster area, so that there is an explosive increase in demand for mobile phones and smartphones. KDDI has built disaster-resistant communication networks so that we can meet the demands of our customers, and in the event that our networks get damaged, we have developed a secure and well-prepared system for quick recovery in all parts of Japan.

Policy and System KDDI

Business Continuity Plan (BCP) Initiatives

Based on its experiences following the Great East Japan Earthquake, KDDI has formulated a Business Continuity Plan (BCP) for Large-Scale Disasters. This plan includes measures to confirm the safety of employees and their families and to carry out the Company's responsibility to continue telecommunications services as a designated public institution. Specifically, the plan establishes detailed rules for responding to a disaster, from initial mobilization to full restoration. We are also building satellite network links to key sites throughout Japan in preparation for a scenario in which all fixed-line and mobile circuits cease to function. The plan also sets forth measures for providing support to emergency shelters.

The effectiveness of the BCP is assessed through regular disaster response training. Any issues and areas of improvement are reflected in subsequent versions of the BCP, and are useful in building a more solid foundation for disaster response.

Establishing a Disaster Response Headquarters in Times of Disaster

In the event of a disaster, a Disaster Response Headquarters will be established in the KDDI head office and at the disaster site with the President as the general manager. A network recovery system that matches the scale of the disaster will be activated to gather and analyze information.

To achieve network recovery in a short-time, we will promptly set up an internal communication system between the Disaster Response Headquarters and the on-site response office. We will secure emergency means of transportation for reserve supplies and materials for disaster recovery, and work on recovery operations using disaster response facilities (emergency power generators, vehicle-mounted wireless base stations, mobile power supply vehicles).

System KDDI

au Disaster Recovery Support System

To quickly grasp the extent of damages during a disaster and formulate a precise recovery plan, KDDI has deployed the au Disaster Recovery Support System throughout its 10 technical centers nationwide. The system provides centralized management of regional damage information, conditions at key sites, and information on emergency shelters and evacuation routes. This information is reflected on maps in real time to provide a clear understanding of priority recovery areas, enabling us to provide effective recovery response even when damage is widespread.

System KDDI

Facilities Measures to Ensure Communications Services in Times of Disaster

Multi-Route Trunk Transmission Lines and Route Distribution

To ensure reliable communications, KDDI works to distribute its telecommunications equipment capacity, establishing redundant communications lines (terrestrial optical fiber) and a structure that uses automated switching to provide relief to the communications network during failures. Undersea cable and other means are used to provide multi-route communications lines, ensuring a highly reliable communications network. In the event of trouble, bypass measures are implemented in an effort to relieve communications.

Strengthening of Disaster Resistance in Communication Stations and Telecommunications Facilities

We have augmented deployment of mobile power supply vehicles and emergency power generators to make possible quick power supply to telecommunications facilities in the disaster area. Furthermore, to ensure communications services in disaster-hit areas, we increased deployment of wireless entrance facilities as well as vehicle-mounted and portable base stations, and equipped around 2,200 mobile phone base stations with batteries capable of operation for more than 24 hours.

Material Issue 1 **Offering Reliable Information and Communications Services**

Highlights

Recovery Support in Times of Disaster

Activity and Results KDDI

Disaster Response Initiative from “Land” “Sea” and “Air”

To ensure a quick recovery when a disaster occurs, in addition to vehicle-mounted and portable base stations as well as “ship-mounted base stations” which are portable base stations installed on ships, we are also working on “unmanned aircraft base stations (drone base stations)” that build a communication network from the sky. A drone base station can be expected to provide temporary mobile phone services from the sky with the aim of recovery in areas where usage of mobile phone services becomes difficult when a disaster strikes. It can also be used in situations where it is difficult to provide mobile phone services from land or sea. In addition to recovery of mobile phone services, we are also studying the possibility of equipping drones with functions for filming the situation in the disaster area from the sky, and transmitting the images in real-time to areas outside the disaster-hit area. Going forward, we will obtain a license for an experimental testing station, and conduct experiments based on the assumption of a disaster scenario in preparation for putting the “unmanned aircraft base station (drone station)” into practical application.