# **Our Social Mission as a Telecommunications Operator**

—Countermeasures for the Great East Japan Earthquake

As a telecommunications operator in charge of social infrastructure, KDDI's social mission is to provide stable services, even in the event of a large-scale disaster. Having learned lessons from the Great East Japan Earthquake, we are strengthening our disaster countermeasures, working to enhance customer convenience and providing ongoing support for reconstruction efforts in the disaster-stricken area.

#### Measures in the Aftermath of the Great East Japan Earthquake

In the aftermath of the Great East Japan Earthquake, KDDI's initial response was vigorous, but a variety of problems arose including disconnections in some areas of our backbone network. Having verified the issues, KDDI is now mounting a companywide effort to construct disaster-tolerant networks and build the necessary internal structures.

## **Expansion of Coverage in the Stricken Area**

### **Providing Service to New Regional Communities**

The progression of the recovery effort in the stricken area presented a new issue—namely, how to optimize services to the numerous temporary housing areas that had been constructed. With the sales and construction divisions working closely together, KDDI sent employees to the area to ascertain the status of communication signals and conduct hearings directly with customers in temporary housing and shelters. We plotted the resulting information onto a single map, which we used to simulate optimal area coverage and erected new au mobile phone base stations

nearby temporary housing blocks in each area. At present, customers in nearly all area containing newly erected temporary

housing have access to au mobile phone services.



New au mobile phone base station installed near temporary housing

## **Aiming for Disaster-tolerant Telecommunication Facilities**

#### Reinforcing Equipment to Enable Network Reconstruction and Quick Recovery

We are also putting in place a variety of measures to enhance network reliability in preparation for potentially massive earthquakes and other large-scale disasters, such as an earthquake directly below the Tokyo metropolitan area or in the Nankai Trough (Tokai, Tonankai, Nankai).

#### 1 Building Disaster-tolerant Networks

We have augmented our backbone network to four routes from three. In FY2012, we will install a new facility monitoring system in Kansai to achieve better dispersion of our monitoring function.

#### 2 Introducing Measures at Facilities to Allow Quick Recovery in Stricken Area

- To supply power quickly to telecommunication facilities in the disaster area, we augmented deployment of mobile power supply vehicles and emergency power generators from 55 units to 130.
- We enhanced facilities as described below to ensure communications services in the disaster area.
  - We increased the deployment of emergency radio entrance facilities\* from 40 sections to 60 to ensure communications between mobile phone base stations and telephone exchange stations.
  - We expanded the number of vehicle-mounted base stations from 15 to 20. We also deployed 27 new moveable base stations.
  - By the end of FY2012, we will equip some 2,000 mobile phone base stations with batteries capable of operation for more than 24 hours.



Vehicle-mounted base station

<sup>\*</sup> Facilities that connect using radio networks in the event a line is broken between a mobile phone base station and telephone exchange station during a disaster



## Offering Services that are Useful in Times of Disaster

### **Providing New Services that Facilitate Safety Confirmation and Secure Communication Liens**

When disaster strikes, voice communication tends to become difficult, owing to congestion from the many customers seeking to confirm the safety of loved ones. For this reason, we have begun offering a variety of new services that people can use as

additional means of communication in such cases. We are enhancing our Emergency Rapid Mail, adding tsunami warnings and disseminating other information that could prove useful in times of disaster.

# 1 Provide the "au Disaster Measure Apps" (December 2011)

This au smartphone app combines a variety of disaster services, including the "Disaster Message Board."

# 2 Add tsunami warnings to Emergency Rapid Mail (March 2012)

In addition to emergency earthquake early warning and disaster/evacuation information, we have begun sending out tsunami warnings from the Japan Meteorological Agency.

# Reinforce e-mail reception in the event of disaster (June 2012)

In the event of a large-scale earthquake measuring 6 or higher on the Japanese Shindo scale, communications linked with an au smartphone app reduce delays in receiving e-mail by up to 90%.

## 4 Provide "Disaster Voice Messaging Service" (June 2012)

This service uses packet communication networks to send a "voice" message verifying the sender's safety.



"au Disaster Measure Apps"

## **Reinforce Business Continuity Plan (BCP)**

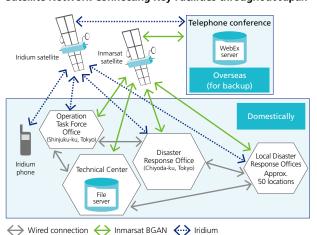
In Addition to Strengthening Systems and Facilities to Cope with Large-Scale Disaster, Providing Initial Response Training at Locations throughout Japan

As a telecommunications operator, it is our responsibility to have in place a structure that ensures business continuity even if a large-scale disaster occurs. Following our experiences in the Great East Japan Earthquake, we established a companywide Disaster Response Project, and in October 2011 we formulated a Business Continuity Plan (BCP) for Large-Scale Disasters. We are pursuing a host of measures to address the plan's objectives of "ensuring the safety of employees and their families" and "fulfilling our responsibilities as a telecommunications operator." Specifically, we have set down detailed rules for each phase of response to disaster, from initial action through to full restoration. We have also created satellite network links to principal bases throughout Japan in preparation for a scenario in which all fixed-line and mobile circuits cease to function. We have identified personnel who will, in the event of disaster, be dispatched quickly to provide support at emergency shelters, and we have stockpiled the equipment necessary for this eventuality.

In parallel with these measures to shore up our structure, we are proactively conducting disaster response training throughout Japan that focuses on initial disaster response. We have introduced a "blind" method of training, in which participants

are not told beforehand what sort of disaster to expect or what the content of training will be. This approach creates a more realistic disaster response environment and enables us to verify our business continuity structure and uncover potential issues.

#### Satellite Network Connecting Key Facilities throughout Japan



### **Efforts to Support Disaster Area Reconstruction**

Now that more than a year has passed since the earthquake, the requirements of the affected area have changed from the short-term—such as donations and relief goods—to needs for longer-term environmental improvement to support restoration and reinvigoration. KDDI is addressing these needs through a variety of initiatives, such as creating employment in the stricken area and providing educational services that make use of ICT (information and communications technologies). Moreover, in FY2012, we have established Reconstruction Support Office, which reports directly to the President, to spearhead medium- to long-term support efforts.

## Creating Employment in the Stricken Area

### Establishing the au Sendai Operations Center for Contracts to Address Employment Mismatches

The employment situation in the stricken area is generally trending toward recovery, but many of the openings are for people with civil engineering and construction backgrounds—a mismatch for candidates for clerical positions. To cultivate employment in the area, in February 2012 KDDI opened the au Sendai Operations Center for Contracts in the city of Sendai, its third such center in Japan. In preparation for the start of operations, we hired 700 local residents for clerical positions.



Company presentation at HelloWork Sendai

VOICE Stakeholder Feedback

#### **Providing Stable Employment to Support Regional Economic Recovery**

In the area surrounding the city of Sendai, the job-to-openings ratio for clerical positions was 0.38 as of February 2012, meaning that only one in three people seeking such work were able to find it.

For this round of recruiting, we went through HelloWork Sendai in search of employees. Our first presentation was attended by 385 people, of whom 250 applied on the spot for interviews. Clearly, our recruiting was very closely attuned to employment demand in this area. The au Sendai Operational Center for Contracts is located just a five-minute walk away from JR Sendai Station, within easy commuting distance in the area where the transportation infrastructure has still not recovered fully from the tsunami's devastation. Our extraordinarily high demand for people in clerical positions, at some 700 people, is attracting major attention for its role in boosting employment in the Sendai environs and stimulating the local economy.

The need to improve the employment situation in the Sendai area is urgent. Companies in the area are expected to require several years to recover from the earthquake-related disaster. I hope that local companies in the region will be able to recover while the economy is supported by the employment opportunities created by new companies moving into the area. In this sense, we are very grateful to KDDI for its recent activities.



Ms. Etsuko Kano Mr. Tomohiko Onoda Chief Mr. Shuetsu Chiba HelloWork Sendai



Manager Operations Group 2 Tohoku Regional Office Operations

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Asa Yanagida

VOICE Stakeholder Feedback from a Manager at the au Sendai Operations Center for Contracts

### **Aiming to Train Future Leaders**

Our presentation attracted many people who said that they "wanted to remain in a clerical position for a long time." They were very positive about the employment possibilities.

We are promoting this employment in cooperation with the East Japan Operations Center for Contracts, with manager backup from the East Japan and West Japan Operations Center for Contracts, but we hope to quickly cultivate managers from within the au Sendai Operations Center for Contracts. If even a single person gains these additional skills and grows, it will help to expand range of the center's operations. Also, when future new offices are set up in the surrounding regions, these people will have the skills to participate. What a pleasant thought.

## **Using ICT to Support Education in the Stricken Area**

#### Supporting Students Preparing for Entrance Exams in the Stricken Area

From November 2011 through March 2012, four organizations— KDDI CORPORATION, Kibou-no-ki Project, Castalia Co. Ltd. and Educational Foundation Shingakukai—collaborated on an effort to provide free-of-charge educational support for students preparing for high school and university entrance exams in the city of Ishinomaki, Miyagi Prefecture.

In this project, visiting instructors held lectures and provided mock examinations, using tablets during lectures on strategies for taking exams offered in other prefectures, and encouraging online learning. In these ways, we provided support for some 120 students in the stricken area, creating a learning environ-

ment akin to those available in prefectures that were not affected by disaster.



Students taking advantage of the online study service

VOICE Stakeholder Feedback from Employees in Charge of Educational Support

#### **Recognizing the Possibilities of ICT**

We were truly moved to see junior and senior high school students wearing earphones attached to tablet computer, intently taking notes as they focused on the screens featuring courses held in other prefectures. We recognized that the use of ICT was a "solution" that allowed us to overcome the limitations of physical distance and time. We were overjoyed to see the pleasure this opportunity brought to people in the stricken area, and this served as a useful case study for us as we go about our business.



(From left) Youko Hara Manager Nami Itahashi Senior Staff

Advanced Business Development Division Global Business Development Department Advanced Business Group KDDI CORPORATION

## **Employee Volunteer Activities in the Stricken Area**

#### **Establishing a Support System and Enhancing Collaborative Volunteer Activities**

From April 2011, KDDI began supporting employee efforts to volunteer in the affected region. We set up a system offering special time off work for up to five days to volunteer in the region, as well as paying for transportation to the region and providing some funds to acquire items needed for volunteer activities. More than 300 employees have taken advantage of this system to volunteer in the stricken area (as of May 2012).

In July 2011, we also began calling for regular volunteers to send to the area, in groups of 20. During FY2012, we plan to concentrate on volunteer activities in the town of Otsuchi, Iwate Prefecture, which suffered major devastation from the tsunami. We are working with Oraga-Otsuchi Yumehiroba, a general incorporated association set up in the area. Through these efforts, we hope to learn

more about conditions in the stricken area and foster interaction with the community.

Employees cleaning up the Kiri Kiri Coast of Otsuchi-cho, Iwate Prefecture



#### TOPICS Exchanging Ideas with People in the Stricken Area

Oraga-Otsuchi Yumehiroba is a general incorporated association that has introduced unique plans to encourage voluntary efforts at restoration, such as "reconstruction tourism" and "reconstruction cafeteria," and has proactively disseminated information from the region nationwide. In May 2012, we held a frank exchange of ideas with this general incorporated association regarding future support activities and its hopes with regard to corporations.

Further details will be made available on the KDDI website (from around September 2012).

CSR information on the web: http://www.kddi.com/english/corporate/csr/

#### Participants in the ideas exchange



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Mr. Kazuyuki Usuzawa

Oraga-Otsuchi Yumehiroba



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