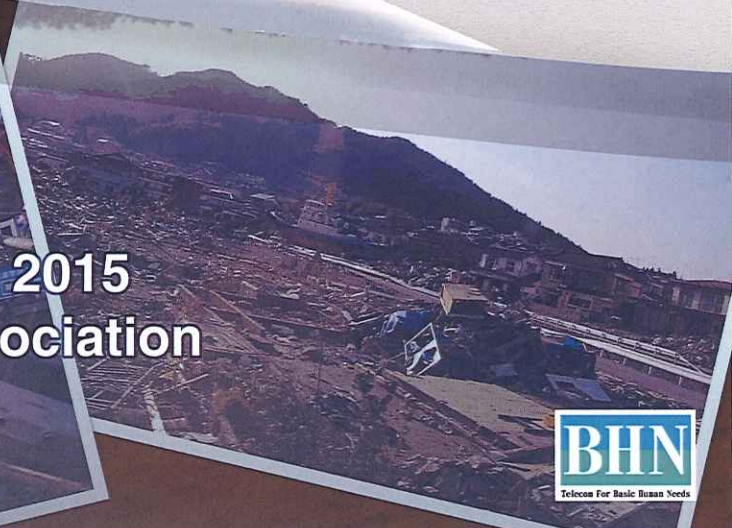
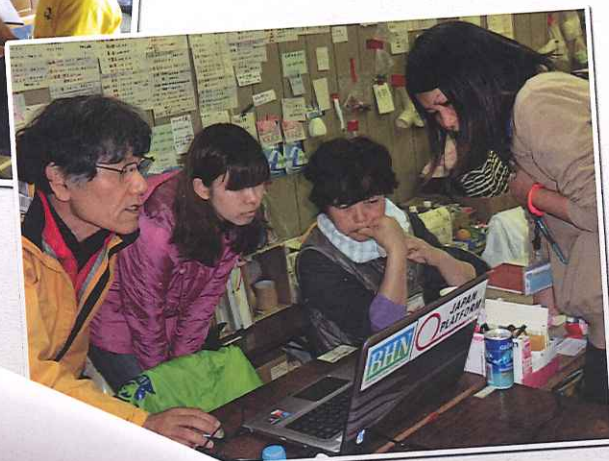
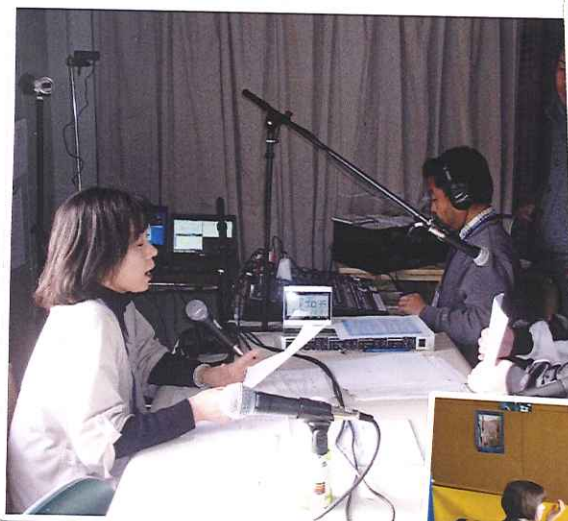


# BHN Association's Relief & Support Activities in Areas Affected by Great East Japan Earthquake



March 2015  
BHN Association

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Activities in Areas Affected by  
Great East Japan Earthquake**

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## Preface

Nearly four years have now passed since the Great East Japan Earthquake struck on March 11, 2011. Around 230,000 people have still not been able to return to their homes, and more than 90,000 people are still obliged to live in temporary housing. Recovery and reconstruction initiatives in the stricken areas are still lagging behind schedule, and the everyday lives of many people are still very difficult. I sincerely hope that they will be able to return to something resembling their normal lives as soon as possible.

The original mission of the BHN Association was to extend relief and support activities in the information and telecommunication fields to people in developing countries but upon viewing on TV the devastation in the disaster stricken areas of Tohoku, we immediately launched support activities for those stricken by this disaster in Japan. Even now, nearly four years after the disaster, we continue to help people in the city of Ishinomaki and the surrounding area in Miyagi Prefecture, and also people in the village of Iitate in Fukushima Prefecture in response to requests we received from local people.

All these activities became possible thanks to the kind donations and support, including financial support and funding, from numerous companies, organizations and individuals with grants from the Japan Platform being conspicuous. I would therefore like to take this opportunity to personally thank all of those who have given this vital support to us.

In March this year, the 3rd UN World Conference on Disaster Risk Reduction will be held. I understand that this will be a very important conference where delegates from governments all over the world will get together to discuss and formulate strategies to cope with future possible disasters. We have decided to take this opportunity to record the support activities we have carried out during the last four years, and to publish them so that they might act to serve as a kind of archive from which anyone in the world may learn lessons for dealing with future disasters. Our report will, of course, also be used as a report to

our donors and supporters as way of thanking them for their contributions.

While writing this preface, the vivid memories of my visit to Tono - the city serving as a logistics support base for many of the rescue teams - on March 29, 2011 came back to me. After securing a base in the city office, we started our preparatory work, and finally, on April 1, we headed for Disaster Response Centers in the coastal areas of Iwate Prefecture in a van filled with radio receivers, portable megaphones and transceivers.

The first disaster stricken area that we visited was the city of Rikuzen-Takata. I remember as if it was yesterday how overwhelmed I was by the devastation caused by the gigantic tsunami when I witnessed with my own eyes the deserted scenes that I had seen on TV so many times when the disaster struck.

Looking back, I feel that there are some areas where we might have done better or where we should have acted differently. In this context, I am sure that this report will serve as a collection of know-how as well as a source for learning lessons from the past, not only for us but also for those volunteers who assisted us.

“Disasters befall us when we least expect them” are the well-known words of Torahiko Terada, the Tokyo University Geophysics Professor and famous essayist, when encountering the Great Kanto Earthquake in 1923. One cannot deny that people’s memories and feelings fade away gradually as time passes. For this reason, we have tried hard to create a detailed record of our activities, while incorporating as many photos as possible, hoping to give you the "you are there" feeling.

I hope that this report will be informative and valuable to you all, and at the same time, I hope that you will continue to extend your warm support to the BHN Association.



March 2015

**MASANORI SATOU**  
Chairman  
BHN Association

## Message from NTT CEO on Occasion of Publication of BHN Report

### HIROO UNOURA

Representative Director and President, Chief Executive Officer  
Nippon Telegraph and Telephone Corporation



Four years have passed since the Great East Japan Earthquake. However, about 240,000 people are still living as evacuees, and about 90,000 people are obliged to live in temporary housing and we still need to provide support to people and the communities in the disaster-affected areas on a day-to-day basis.

Under such circumstances, the BHN Association, which has a proud record of humanitarian relief initiatives internationally and domestically based on its long-standing expertise in the ICT field, has been engaged in a variety of support activities in the disaster-affected areas in northern Japan from soon after the disaster occurred until the present. This includes support for local communities and healthcare. A good example is the provision of personal computer (PC) classes for the members of the residents' associations in the temporary housing areas in the cities of Ishinomaki and Higashi-Matsushima and the town of Minami-Sanriku. This fostering of people's PC skills not only contributed to collecting of information immediately after the disaster struck but also contributed to the better and faster dissemination of information to the outside world about what is happening in the disaster affected areas. Moreover, PCs are used for communication inside and among the communities, and I think this is a classic embodiment of the BHN Association's stated mission, namely, "to support people and countries in need of information by utilizing information and communication technologies."

In this disaster, the NTT Group's telecommunication infrastructure suffered unprecedented damage thereby interrupting telecommunication services in some places. As the company responsible for telecommunication infrastructure which is one of the lifelines for its citizens, I was struck once again by the

importance of "connecting people to people." In order to cope with this unprecedented catastrophe, the NTT Group launched recovery and reconstruction activities mobilizing more than 10,000 people and as a result of their hard work, they were able to repair the telecommunication buildings and get the mobile stations back up and running normally before the end of April. Furthermore, we donated ICT equipment to the affected areas through the BHN Association together with human support provided by our company employees and retirees.

Currently, we are taking further steps to improve the stability and reliability of our telecommunication networks such as by implementing protection switching of transmission lines, and by enhancing network robustness against disasters, for example, by countermeasures against power failures and by conducting disaster drills. In parallel with these steps, we have been trying to help the people affected by the disaster to regain their physical and mental wellbeing as quickly as possible by offering healthcare services by means of videoconferencing systems, and we have even been helping elementary and junior high school students to study by donating electronic drill textbooks.

I think the compilation and publication of this report will be very meaningful by enabling people to understand the support activities provided following the disaster and also it will enable us to prepare for possible future disasters. As a company endeavoring to solve social problems through the use of ICT, each company in the NTT Group will continue to support the activities of the BHN Association, while hoping for the earliest possible full recovery of the disaster-stricken areas and the people living there.

## Decision to Mobilize Emergency Relief Activities after Great East Japan Earthquake

**MORIJI KUWABARA**  
Honorary Advisor



### 1. March 11, 2011

At 2:46 p.m. on March 11, 2011, at the time the Great East Japan Earthquake struck east Japan, I was in front of my PC at home writing an article and talking on the phone with the CEO of one of the corporate members of the BHN Association. When the big quake came, he sensed something terrible had happened and immediately hung up to check if everything is OK within the company. I myself did not really worry about my physical safety so much because the quake seemed to be a bit smaller in Urawa, where I live, than in Tokyo. But as I switched on the TV, I could easily know that there would be big confusion in Tokyo's public transportation network and so I phoned the BHN office and told the members that it may not be wise to try to rush home and that they should bring in food so as to prepare for a possible overnight stay in the office. I also called the secretariat of the Kanto Den-yukai (NTT Alumni Association in the Kanto Area) of which I was serving as Chairman at the time, and told them the same thing. It must have been slightly before 4 pm, and luckily, the calls were connected immediately.

As evening approached, it soon became apparent that the damage inflicted on East Japan was of an unprecedented magnitude. Before retiring from NTT, I had the experience of working in the city of Sendai, and I phoned my friends from that time one after another. However, most of the time I received the "busy" signal, and even though the calls went through from time to time, they were mostly directed to answering machines announcing a service disruption, and the rest got no answers even though I could hear ring-back tones. One of the friends, whom I finally succeeded to talk to, told me that the social infrastructure such as gas, electricity and water utilities had been completely destroyed.

On the following Monday, March 14th, the BHN Association's weekly secretarial meeting was held in the BHN office, and it was reported that all the members were safe but that President Mr. Uehara and one other member had walked back home taking many hours to do so. The rest of the secretariat members stayed

overnight in the office. Once these reports had been made, the discussion moved on to how BHN should provide relief activities in the disaster-stricken areas and help the people affected.

### 2. Decision to launch relief activities

As you may know, the BHN Association's main mission is to help developing countries mainly in Southeast Asia in the field of telecommunications. Our support activities comprise three pillars: emergency relief activities in time of disaster; grassroots support for people unable to enjoy the benefits of telecommunications services because of poor infrastructure and lack of funding; and the development of human resources by training young people who are expected to become future executives in the telecommunications business in the region. We had thought that Japan was not in need of support in the above-mentioned three categories.

Indeed, when the Great Hanshin-Awaji Earthquake occurred in 1995, more than 6,000 people died because of the collapse of buildings and houses, and there was also big damage to gas and water supplies but there was little damage to the telephone exchanges in the affected area and telecommunication service interruption was mainly due to burnt out subscriber lines and telephone sets. In addition, immediately after the disaster, large-scale telecom rescue teams from all over Japan were dispatched to the affected area so that there was no need for the BHN Association to launch any emergency relief actions.

But the situation was quite different in the case of the Great East Japan Earthquake. Entry into the building of NTT Sendai Branch which was managing the company's activities in the Tohoku Area was even restricted because the building suffered damage from the earthquake, and it was weeks before it could be restored enough to function as the control center. Furthermore, most of the lives lost and the material damage caused was due to the tsunami that was triggered by the earthquake and the telephone exchanges situated in the coastal areas were damaged if not destroyed by

the earthquake. In fact, communication links between the coastal areas and inland cities such as Sendai and Morioka were also cut.

The damage in the affected areas was far more devastating than anything the BHN Association had seen in developing countries when providing emergency relief support. It seemed to me that, although NTT had been regularly conducting disaster drills, they were faced with unprecedented challenges in trying to get telecommunication services and their infrastructure operating normally again. During the meeting the point was made that, although BHN's main focus lies in the support of developing countries, we should not overlook the terrible disaster that has struck our own

country. It was a very important decision to make, but being in an emergency situation, I, as BHN Chairman, together with Mr. Uehara, then BHN President, decided to start BHN's first domestic emergency relief activities.

The first action was the dispatch of a five-member team led by Mr. Masanori Satou, then BHN Vice-President, which left for the city of Tono in Iwate prefecture - the city which served as a logistics support base for many of the rescue teams - on March 28 in two vans filled with emergency communication equipment, radios, blankets, towels and so on, that had been donated by members of the NTT Labor Union and Kanto Den-yukai.



BHN members seeing off BHN Emergency Relief team



## History of BHN's Legal Status and Great East Japan Earthquake Disaster

**KIYOTO UEHARA**  
Honorary Advisor



As a result of the Great Hanshin-Awaji Disaster which occurred in and around Kobe in Japan in 1995, it has been said 1995 was year zero in the history of volunteering in Japan.

Triggered by that disaster, volunteering in Japan began to be conducted in an organized way for the first time. Consequently, the necessity for developing volunteer systems started to be discussed and recognized, and the term “Relief Volunteer” engaging in rescue, relief and recovery in disaster-stricken areas began to become widely accepted in Japan.

Hence, one salient outcome of such developments was discussion on the creation of legal reform to cover volunteer work and one result of that was the Act on Promotion of Specified Non-profit Activities (so-called NPO Act) enacted in 1998.

Before the enactment of this law, volunteer groups were not recognized as legal entities, and the opening of a bank account or the renting of office space could only be made by one of the members of the group in a private capacity. However, after the enactment, when certain criteria are judged to be met, such as that the group will not distribute profits gained through its activities to its donors or members, and that the group’s scope of work falls within twenty stipulated categories, the group can apply to be approved as a legal entity and various contracts can be made under the name of the group, such as, in our case, “BHN Association.”

However, it should be noted that the BHN Association started its activities long before such a legal framework started to evolve. In 1992, some retired persons from NTT, Japan's incumbent telecom operator, got together with retirees from various other companies such as NEC, Fujitsu and Omron and some university professors and held an inaugural meeting in which they adopted a resolution pledging their commitment to help the disaster-stricken people and people who could not enjoy the benefits of telecommunication by making use of their experience and expertise in the field of telecommunications. They immediately started to act as a voluntary group, mainly for international cooperation, and their first

project was to help victims of the Chernobyl nuclear disaster.

The BHN Association kept a keen eye on developments in Japan’s legal system relating to the legal status of volunteer groups, and following the enactment of the new law in December 1998, the BHN Association applied for and obtained the status of a Specified Non-profit Corporation in early 1999, so as to be able to enjoy the benefits given to such organizations.

Following the introduction of the new law, a Certified NPO System was introduced in 2001.

Based on the requirements stipulated by the Japan National Tax Agency, i.e. “that the management and the activities of an NPO are decent, and that its activities contribute to the promotion of public benefits,” certain criteria for certification are laid down in the Certified NPO System, for example stipulating transparent and reliable accounting. When an NPO passes this tough examination it is approved as a Certified NPO. This system was introduced in order to stimulate donations to volunteer groups by giving tax benefits to those individuals and organizations who donate to Certified NPOs.

The BHN Association received its Certified NPO status in March 2010<sup>1</sup>.

This means not only that individuals and organizations who donate to the BHN Association will be able to gain some tax benefits, but also that the activities and the organizational management of the BHN Association has been publicly acknowledged, so that we were happy that our public credibility has been elevated. This also motivated us to further promote our daily support activities.

It should be noted that, with respect to this certification, only about 570 NPOs out of the estimated 40,000 or more NPOs (as of the end of August 2014) have been certified, which seems to imply that it is not so easy to pass the very strict examination.

Prior to the Great East Japan Earthquake in 2011, the BHN Association’s policy had been to focus on providing support activities to disaster-stricken people and to people who could not enjoy the benefits of telecommunication



in foreign countries. However, after the 2011 earthquake, in the light of the severity of the damage and the size of the affected area, we immediately changed our policy so that we now also extend our support activities to those who need them in Japan. As for the funding for our activities, we are deeply indebted to the various individuals and organizations supporting us.

In this context, I would like to refer to the "special exemption for designated donations to aid the recovery from specific earthquakes." In this system, donors making donations designating that their money should be used for the recovery and restoration from the Great East Japan Earthquake can receive further tax benefits in addition to the ones already given in the Certified NPO System. This scheme at the same time stipulates that such donations can only be used for the designated purposes, i.e. recovery from the Great East Japan Earthquake, and that if any money is left after 31 December 2014, the remaining money shall be

donated to the local government and/or the Red Cross.

In January 2012, the BHN Association obtained approval from the Commissioner of the Tokyo Regional Taxation Bureau to use the aforementioned scheme to collect donations. We are honored and grateful for all the donations we have received through this scheme which have amounted to about 17,000,000 yen - a considerable amount of money -, and all of the designated donations were used efficiently in our support activities for the people affected by the Great East Japan Earthquake before the end of 2014.

<sup>1</sup> This certification system was replaced by a new system in April 2012. However, certification under the old system is valid until the end of its validity period. Accordingly, the BHN Association renewed its certification in February 2015.



Mr. Uehara receiving support goods donated from Mr. Masashi Takahashi, then Executive Vice President of All NTT Workers Union of Japan

**Overall Review of BHN Disaster Relief Activities from March 2011 to December 2014 Following Great East Japan Earthquake Disaster**  
*- Support activities summary, income and expenditure report, evaluation & reflection, and thoughts about future activities -*

**SATOSHI FUJITA**  
President BHN Association



**1. Introduction - Great East Japan Earthquake and its devastation**

The 9.0 magnitude earthquake, the biggest ever recorded in the history of Japan, occurred off the coast of Miyagi Prefecture on March 11, 2011. It was followed by huge tsunamis that caused terrible destruction and devastation to the coastal areas of Iwate, Miyagi and Fukushima Prefectures and also led to a serious secondary disaster at the Fukushima Nuclear Power Plant. (see the map of Japan on page 13)

The disaster brought widespread death and devastation with 18,500 people dead or missing, more than 400,000 evacuated, over 400,000 homes lost or destroyed, and more than 8,000,000 homes affected by power failures. As of the end of December 2014, 240,000 people are still living as evacuees, forced to live in temporary housing and unable to return to anything like their former life style.

The Basic Human Needs Association (BHN) is a non-governmental organization originally founded to provide information and communications technology (ICT) assistance to those affected by large-scale natural disasters in developing countries such as Indonesia following the Great Indian Ocean Tsunami of 2004 and the Haiti Earthquake of 2010.

While its focus used to be on overseas support activities, after realizing the enormous damage caused by the Great East Japan Earthquake, BHN moved very quickly and started its initial relief activities the day after the earthquake. Today it is still continuing its assistance to the refugees of Iitate village in Fukushima Prefecture and to Ishinomaki and its surrounding areas in Miyagi Prefecture.

This assistance would have been impossible without the tremendous support of the following supporters and partners:

**Financial support and other aid:** Japan Platform, Global Giving Foundation, Mitsubishi Corporation Disaster Relief Foundation, Red Feather Disaster Volunteer

Support Donations, National Tax agency-defined special purpose donations from various firms such as Sega Holdings, Symantec Japan, Microsoft Japan, NTT East, NTT DOCOMO and NTT Labor Union.

**Partners:** HuMA, Japan Telework Association, Ishinomaki Senshu University, Ishinomaki-shinkin Bank, Tono City, Iitate Village (the mayor, city officials and its Social Welfare Council (SWC))

Deep gratitude is also due to our project members and to the numerous individual volunteers from the Tohoku region without whose efforts little could have been achieved.

**2. Outline of activities**

BHN support activities included initial medical assistance but focused on five major projects in the three severely hit prefectures of Iwate, Miyagi and Fukushima.

An outline of the initial activity and the five projects is given below but please also refer to the detailed descriptions of each of the five projects in the following Parts 1-5.

It should be noted that the assistance given through each project changed over time reflecting the changing needs of the affected people but it can be divided into three basic phases: the initial emergency assistance phase; the recovery process; and the final renaissance phase. Each project was/is made up of sub-projects. The Iitate project, for example, can be divided into 10 sub-projects, depending on the target beneficiaries, the time of execution and the source of the aid, and BHN is now implementing the 8th, 9th and 10th sub-projects.

**1) Initial emergency medical support**

On the day after the main earthquake, Dr. Naoyuki Kawahara, who had just returned from Africa, rushed to Natori City in Miyagi Prefecture to offer support to its hospitals using an ambulance car arranged by BHN

Board Member Dr. Osamu Ohtsubo. He was accompanied by BHN Councilor Sadao Ito.

## **2) Assistance in coastal areas of Iwate Prefecture severely hit by tsunamis in cooperation with Tono City**

BHN provided assistance to Rikuzen-Takata, Ofunato, Kamaishi, Miyako, Ohtsuchi and Yamada in the coastal areas of Iwate Prefecture which suffered catastrophic damage from tsunamis.

This project was organized in response to the request from Tono City which has a mutual emergency assistance agreement with the above-mentioned municipalities and is in the ideal position to act as a logistics center. BHN already had quite close ties with Tono through its remote medicine activities.

BHN's support included setting up of temporary Internet access systems in the disaster control centers and the evacuation centers in Tono, and in four large towns and two smaller towns so that, besides enabling people from outside the disaster area to check the whereabouts and verify the safety of local people and facilitating the provision of remote medical support, the survivors themselves had access to and could use the systems. It also included donation of radio transceivers and portable megaphones to the people engaged in assistance activities in evacuation centers, etc. thereby speeding up their work, distribution of radios to survivors and monitoring of the changing situation in evacuation centers and provision of telecommunication technology assistance where necessary.

This project was funded initially by JPF during the initial May to September 2011 period and then continued by means of BHN's own funds until the end of March 2012.

Temporary Internet access systems were installed in 67 locations, including 23 evacuation centers, 16 municipal offices, 16 support organizations, 6 schools, 4 hospitals and two other facilities and were well received and utilized by evacuees, NGOs and municipal officials.

## **3) Temporary Disaster Radio Stations (TDRS)**

Most of the TDRSs were set up hastily and faced numerous operational problems such as poor radio reception in nearby areas and the fact they could often only get hold of old equipment which was unsuitable or unstable. To resolve these problems BHN carried out the following support works for seven TDRSs:

### **(1) Minami-Sanriku Town TDRS in Miyagi Prefecture:**

Moved the antenna in order to resolve the problem of bad radio reception in one of the towns in the merged municipality.

### **(2) Ohtsuchi Town TDRS in Iwate Prefecture:**

Helped get the TDRS operational after delay caused by the loss of the town's top officials and the complicated geography.

### **(3) Rikuzen-Takata City TDRS in Iwate Prefecture:**

Donated broadcasting equipment to replace the old borrowed equipment and built a radio relay circuit to connect the studio and the radio antenna.

### **(4) Watari Town TDRS in Miyagi Prefecture:**

Installed radio signal boosting equipment in temporary housing and moved the broadcasting antenna to a hill top to overcome poor radio reception.

### **(5) Yamamoto Town TDRS in Miyagi Prefecture:**

Installed boosters in temporary housing facilities and built collective antennas in other locations in order to improve radio wave reception.

### **(6) Natori City TDRS in Miyagi Prefecture:**

Provided consulting services regarding the design and procurement of the broadcasting facilities and helped the remodeling of the community radio station.

### **(7) Minami-Soma City TDRS in Fukushima Prefecture:**

After obtaining permission to install antenna on a tower on the top of a mountain, moved broadcasting antenna there, in order to provide broadcast coverage to all the areas in the city.

BHN also provided ICT support to another 14 stations and all these efforts were the work of a team of experts headed by Masanori Nomura, a BHN director who used to be an NHK broadcasting technology expert.



Minami-Soma Temporary Disaster Broadcasting Station



#### **4) Assistance in provision of communication networks and health care to evacuated villagers of Iitate village in the Fukushima Prefecture affected by nuclear power station accident**

##### **a) Assistance to facilitate communication among scattered evacuees**

In the initial phase of BHN assistance activities Internet access, video phones and teleconferencing systems were provided in 29 locations, including the old and new village offices, evacuated infant schools, two temporary kindergarten schools, the temporary elementary school created to provide education to the students of the four original village schools, the temporary junior high school, the temporary high school, a nursing facility for the elderly, and the meeting rooms and community offices of the temporary group housing facilities in 20 locations, in order to set up communication networks and to maintain the ties of scattered citizens and to communicate information from the village offices to the evacuees.

In addition, BHN provided ICT training to older people and those who didn't have a good knowledge of ICT. PC and mobile phone classes were conducted more than 100 times in 10 months. Copy machines and printers supplied by BHN were also in frequent use providing village news, community notices of various events, and other information. BHN staff even oversaw the creation of web sites for 10 of these new communities.

##### **b) Health support**

In order to better address the health issues caused by the evacuation, BHN asked another NGO called Humanitarian Medical Assistance (HuMA), an association of doctors and nurses from all over Japan, to cooperate in the provision of health care in the second phase of its assistance activities.

Because of the lack of nurses and doctors locally, there was almost no specialist health care available except that relating to radiation concerns regarding the Iitate patrol teams totaling about 400 villagers who conduct patrols in the evacuated villages which have high levels of radiation. They patrol both during the day and at night and wear radiation dosimeters.

Many members of the patrol teams experienced increased weight and blood pressure and also suffered from severe stress due to not

being able to engage in their former farming activities, to living in small temporary housing units, to eating high calorie lunch boxes instead of the traditional home-made dishes they are accustomed to, and due to the lack of exercise. Volunteering HuMA doctors and nurses have provided health consultations and BHN has supported these health consultations and also provided pedometers with ID functions that encourage exercise and walking. Meanwhile, Thai massages by a volunteering professional specialist were also provided and were greatly appreciated as was the El Salvador coffee provided from UCC Holdings and served by BHN members.

In addition, similar health support has also been provided to those evacuees living in individually leased houses when they attend get-together tea parties held by Iitate's CSW in Fukushima, Date and Kawamata and also at neighborhood community associations in Kawamata, Minami-Soma and Date.

In summary, BHN provided health consultations for 740 people in total and 600 pedometers while 620 people were the recipients of Thai massages up until October 2014.

Two other support activities worthy of mention involved students: one was the donation of PCs to Soma Agriculture High School and the other was the arranging of a special live video interactive class from the Japanese Antarctic wintering party. Both activities were arranged by BHN and both were well received.



Health consultation for Iitate villagers

#### **5) ICT training and job-seeking assistance in Ishinomaki area of Miyagi Prefecture**

BHN's support activities for the people of Ishinomaki and neighboring areas in Miyagi Prefecture affected by most destructive tsunamis was focused in the following three projects:

- a) The BHN Association opened a Volunteer Communication Center and a Telework Center in Ishinomaki Senshu University

in August 2011, and provided Internet and personal computer training to evacuees from Ishinomaki and Onagawa, and also to fishery associations in the region.

- b) BHN held “PC Courses for Hobby and Job Assistance” in the meeting rooms of the temporary housing facilities in Ishinomaki, Higashi-Matsushima, Tome and Onagawa. In addition, there were “PC Classes for the over 60s Elderly” and specific PC courses to help develop the skills of management teams working in the local community associations of evacuees were also provided and were highly appreciated.
- c) Ishinomaki Senshu University ICT Open College was created jointly by BHN and Ishinomaki Senshu University in order to support the recovery of small and medium-sized enterprises as well as enabling the survivors of the disaster to improve their computer skills in order to help them find jobs. The college held three one-month terms between August 2012 and November 2013. The courses started with elementary classes and students could then move on to advanced classes covering applications and security.



ICT Open College in Ishinomaki-Shinkin Bank

#### **6) Support activities utilizing tax exempt designated donations for restoration to help affected people in Ishinomaki and surrounding areas in Miyagi Prefecture**

As the result of the initiative of Mr. Koichiro Shinohara, BHN Director, BHN received approval from the Japan National Tax Agency on January 27 2012 enabling it to handle Specific Tax Exempt Designated Donations for Restoration.

The following support activities were eligible for this specific tax exemption:

- a) Provision of communication networks such as those providing Internet access, remote medicine and health support to people affected by the disaster and to related municipalities
- b) Support for Temporary Disaster Radio

Stations including IT support

- c) Provision of health support and information about decontamination to people affected by the nuclear power plant accident.

Fund raising involving these donations was authorized from January 28 2012 until the end of December 2013. Support activities based on these donations were required to be completed by the end of 2014.

Those activities were supported by donations from 16 companies including Sega Sammy Holdings and hardware and software was provided by four firms as explained below.

Of three categories of support activities approved by the Tax Agency, the focus of efforts in the first category was the provision of Internet and ICT support in Ishinomaki and surrounding areas in Miyagi Prefecture.

BHN provided Internet access in 38 locations including the local community associations in temporary group housing facilities for evacuees in Ishinomaki, Higashi-Matsushima, Tome and Minami-Sanriku. In addition, 120 PCs were also provided with the necessary software installed and more than 110 PC training courses were given to the evacuees, and also to the management teams of the local community associations were held as well as 120 times of monitoring of those Internet facilities. All were evaluated in the results of questionnaires responded to by the beneficiaries as being much appreciated.

These activities were supported by Mitsubishi Corporation Disaster Relief Foundation, Red Feather Disaster Volunteer Support Donation, Symantec Japan, Microsoft Japan and NTT DOCOMO-Point Donations and executed with the collaboration of partners such as the Japan Telemark Association, Ishinomaki-shinkin Bank, and Ishinomaki Senshu University.

### **3. Report on income and expenditures**

The total expenditure on BHN’s support activities in the areas devastated by the effects of the Great East Japan Earthquake from March 2011 to December 2014 was approximately 210 million yen (Approx. \$1.8 million). As shown in Table 1, the expenditure for the fiscal years 2011, 2012, 2013, and 2014 were 112 million yen (\$1 million), 51 million yen (\$450,000), 35 million yen (\$300,000) and 8 million yen (\$70,000) respectively. Although the peak of BHN’s activities has passed, we still continue our support for Iitate in Fukushima Prefecture and to Ishinomaki and the surrounding areas in Miyagi Prefecture.

Looking at all of BHN's activities both abroad and in Japan, the support activities relating to the Great East Japan Earthquake greatly increased the total volume of BHN's activities as is shown in Figure 1 and the total in the 2011 fiscal year increased almost 90% over the figure for the previous year.

BHN's annual support activities relating to the Great East Japan Earthquake as a percentage of total activities were 58 % in 2011, 39 % in 2012 and 20 % in 2013, respectively.

The expenditure for each project is also shown in Table 1: The support in Iwate coastal area totaled 38 million yen (approx. \$ 300,000), that for Temporary Disaster Radio Stations was 43 million yen (\$400,000), that to Iitate village was 80 million (\$700,000), the ICT supports in Ishinomaki and surrounding area was 30 million yen (\$250,000), and the support using specific tax exemption donations to Ishinomaki, etc. totaled 19 million yen (\$200,000).

The BHN Association is extremely grateful for all the support and donations it has received and would like to thank all those concerned.

#### **4. Evaluation of activities**

##### **1) Evaluation criteria**

Considering the seven evaluation criteria defined by DAC (Development Aid Committee of OECD) for development aids and the five important criteria determined by JANIC for activities to the Great East Japan Earthquake, BHN decided to evaluate its activities by the following seven items:

- a) Speed or swiftness to obtain information and decide actions
- b) Acquisition of necessary resources including human resources, support materials, technology and funds
- c) Collaboration with partners
- d) Degree to which support fitted the needs of the affected people, depending on the different phases of rescue and recovery
- e) Continuity and sustainability including its exit strategy
- f) Whether or not we could appropriately run the PDCA cycle (Plan-Do-Check-Action) and make necessary revisions
- g) Safety measures and risk management

##### **2) Evaluation of activities**

The project managers of the five major projects each completed an evaluation according to the above seven criteria and discussed jointly and together with the management.

Many supporting organizations such as JPF requested BHN to prepare evaluation criteria in the planning stages when applying for funds as well as during the final report stage. Those criteria were quite useful in the process of planning, execution, monitoring and making final reports.

The following is a summary of the evaluation of the total activities:

##### **a) Swiftness in information gathering, decision-making and actions**

The top management decision by the Chairman and President to initiate support activities for the people affected by the Great East Japan Earthquake was very quickly made on the first business day after the earthquake, despite the fact that this decision was a departure from traditional BHN policy focusing on developing countries. This made a good quick start. Also initial medical support was started by the support of one of the Directors, one day after.

Valuable information and requests for support from the Mayor of Tono city, who used to be a BHN partner, and the medicine and supporting materials provided by our supporters helped the quick start.

Meanwhile, the menu of BHN ICT support after such a disaster was not sufficient and need to be more enriched.

##### **b) Securing of necessary resources**

Financial support obtained from JPF and Global Giving was quite effective in the initial stage. The materials such as hardware and software provided by various supporters such as NTT group companies, NTT Labor Union, Symantec, Microsoft Japan, NICT and many others were also very useful.

In addition, continuous efforts to seek other financial resources and cooperation from other partners were also successful.

Regarding our human resources, the new BHN members from Fukushima and Miyagi Prefectures played important roles in understanding the real needs of the people we were seeking to help and also in the continuation of BHN's support. We were also very fortunate to have such energetic and appropriate experts as Mr. Masanori Nomura, a former NHK engineer and Mr. Takashi Yokono from Nagasaki who spent several months in the region. In the fields where BHN didn't have human resources,



our partners were able to provide the experts such as the doctors and nurses from HuMA. We also had a lot of support and cooperation from the Telework Association, Ishinomaki Senshu University, the Ishinomaki-shinkin Bank and Tono City.

This support was vitally important and taught us a good lesson which we intend to apply in our future activities abroad.

**c) Collaboration with partners**

As seen in the detailed description in a) and b) above, the collaboration with partners was the most important factor for the acquisition of quick information and necessary resources.

**d) Appropriateness of our support to the actual needs of the affected people which varied in the different phases of rescue and recovery**

In the initial stage, Internet access and other communication means were urgently required to assist the affected people, NGOs and municipalities but then the focus moved to health care and job seeking and other recovery activities. In general our learning of the needs and our planning to meet those needs were more than adequate and obtained good evaluations from the people and mayors in the region.

Meanwhile, ICT literacy among the people in the affected areas was less than expected and BHN had to spend a lot of time and resources supplying ICT education. Because of the lack of doctors and nurses, the remote medicine system was not well used initially but later on became well utilized thanks to the support of our partner HuMA.

**e) Continuity and sustainability including exit strategy**

Some of our activities have moved on to the next phase of delivery while others have ended.

The equipment provided in emergency ICT support activities in Iwate Prefecture was given to local municipal offices and other places which were judged to have need of it. The ICT Open College was successfully handed over to Senshu University while the ICT support to community associations in Ishinomaki and neighboring places will be continued until the end of 2015 as will consultations to Temporary Disaster Radio Stations.

The need to provide support to the people

of Iitate village still continues and we have decided jointly with HuMA to extend our support at least until the end of the 2015 fiscal year and thus we continue our efforts.

**f) PDCA cycle (Plan-Do-Check-Action)**

Although BHN didn't have a carefully laid-out plan at the very beginning, we have added to and revised our overall plan depending on the availability of resources and the cooperation with our partners while also trying to reflect the opinions of our stake holders and the responses to questionnaires periodically sent to beneficiaries.

**g) Safety measures and risk management**

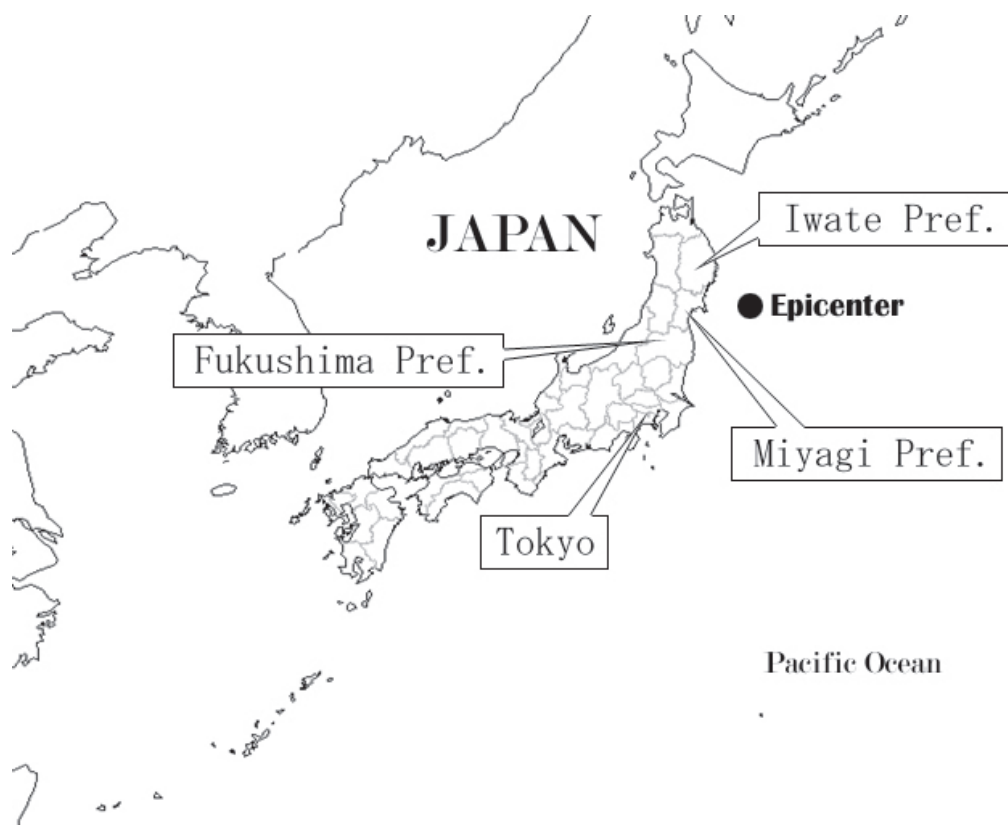
The effects of additional earthquakes and radiation were fortunately not significant despite our having serious initial concerns and we may need to be more cautious in the future. We were able to get safe offices and facilities through the cooperation of our partners and supporters. Meanwhile, the amount of ICT equipment and other equipment that was lost or faulty was more than expected and this should be reflected in our future projects.

**5. Looking forward**

Since we are still continuing our support to people affected by the East Japan Great Earthquake, it is too early to talk about the lessons learned and to compile a final summary.

We would like to again thank our various wonderful supporters, great partners and eager volunteers and fine project staff and conclude this report by promising to fully utilize the following four lessons we have learned so far in our future activities in Japan and abroad:

- 1) The need to enrich the menu of BHN ICT support which can be utilized in times of major disasters
- 2) The advisability of gathering more information on resources utilized and partners we have collaborated with in the time of natural disasters and the need to maintain a continuous dialogue with such partners
- 3) The necessity of preparing reports and carrying out reviews including evaluations of our activities at appropriate times
- 4) The need to hold simulations and to practice the implementation of emergency ICT support delivery procedures in areas which may be affected by future natural disasters



Map of Japan showing earthquake epicenter and affected prefectures

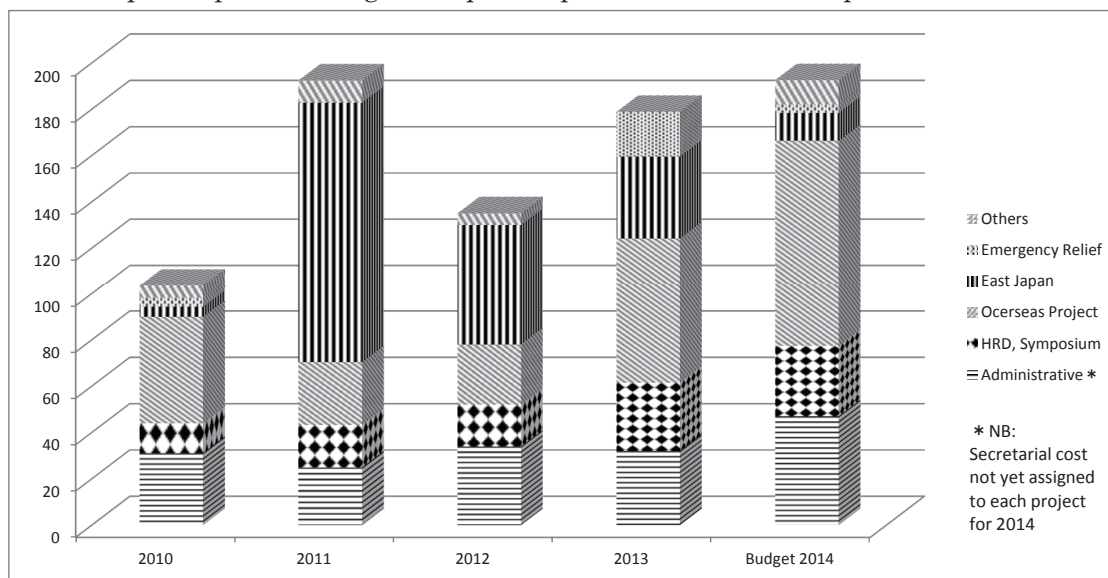


Figure 1: Breakdown of BHN expenditure by year and category including Great East Japan Earthquake

	FY2010	FY2011	FY2012	FY2013	FY2014	Total	<Income> Aid, Donation, Etc
Initial Emergency Support	248					248	401
Iwate Pref. Support	4,132	33,876	455			38,463	37,461
TDRS Support	12	25,389	11,711	5,430	409	42,948	40,534
Iitate Village Support		42,502	15,415	17,224	5,738	79,807	77,529
Designated Donation			7,450	9,319	3,073	19,395	16,933
Ishinomaki IT Support		10,750	16,094	3,492	194	30,463	22,446
Charity Concert	1,922					1,922	1,500
	6,314	112,517	51,125	35,465	9,414	214,835	196,804

Table 1: Breakdown of cost of support relating to Great East Japan Earthquake (Unit: thousand yen)

## PART 1

# BHN Assistance in Coastal Areas of Iwate prefecture Affected by Great East Japan Earthquake

TAKASHI YOKONO, Counselor  
HACHIHEI KUREMATSU, Vice President  
MASANORI SATOU, Chairman

### 1. Introduction Great East Japan Earthquake and Devastation

At 2:46 PM on March 11, 2011 a 9.0 magnitude earthquake, the biggest recorded in the history of Japan, occurred off the coast of Miyagi prefecture in Japan's Tohoku region. This was followed by huge tsunamis that caused terrible destruction and devastation to the coastal areas of Iwate, Miyagi and Fukushima Prefectures making it the greatest earthquake-related disaster after World War II. Up until this disaster the maximum height of tsunamis to hit this region was 10 meters. However, this earthquake was on a scale beyond all predictions and the result was terrible destruction and many many deaths and injuries.

According to newspapers and the media, the disaster caused by the tsunamis was far bigger than that caused by the earthquake. Right now, as of March 11, 2014, 15,882 people are dead, 2,668 are missing and 243,040 people have been displaced. 90% of the dead are estimated

to have died by drowning. In addition, this disaster led to a serious secondary disaster at the Fukushima Nuclear Power Plant and this incident has still not been completely settled. According to the government's preliminary estimates, the final cost of the damage caused by this terrible disaster will be between 16 and 25 trillion yen.

Japan's telecommunications infrastructure was severely damaged as a result of this earthquake disaster. According to NTT, 1,500,000 fixed line subscriber service circuits, about 6,700 mobile base stations and about 15,000 data circuits for businesses were cut off or destroyed as of March 13 due to the earthquake and tsunamis. The cost of the damage caused by the disaster to NTT Group's businesses is calculated to have been about 110 billion yen.



Great East Japan Earthquake devastation and a ship deposited inland by tsunami



## 2. BHN Initiatives

The Basic Human Needs Association (BHN Association) is a non-government and non-profit organization and one of its main missions is providing emergency humanitarian aid to survivors and refugees at times of large-scale disasters in developing countries. For example, in 2010 the BHN offered aid to Haiti when it was devastated by a huge earthquake, and after the Super Typhoon struck the Philippines in 2013, we sent a team to the Philippines and supported the people affected by the typhoon.

Observing the scenes of enormous damage caused by the Great East Japan Earthquake, BHN immediately moved into action.

BHN has quite close ties with the city of Tono in Iwate Prefecture and began supporting the city's relief activities such as checking whether residents in nearby affected areas were safe and well, and helping with rescue and evacuations. Tono has been a transport hub connecting the inland and the coast since the Edo era, more than 150 years ago, and thus was in a good position to be the logistical support base for activities in Rikuzen-Takata, Ofunato, Kamaishi, Miyako, Otsuchji and Yamada in the coastal part of Iwate Prefecture which suffered catastrophic damage.

One year before the 2011 disaster, BHN had brought a Thai medical team to Tono to observe Tono's medical support service that utilizes Information and Communications Technology (ICT), and, having thereby developed a close relationship with BHN, the city requested assistance from us.

The details of our assistance are as follows:

- 1) Setting up of temporary Internet access systems in the disaster response control centers and evacuation centers in Tono, and

in four large towns and two smaller towns so that besides checking the whereabouts and safety of local people and providing medical support, the survivors themselves could use the systems,

- 2) Donating radio transceivers and portable megaphones to the people engaged in assistance activities in evacuation centers, etc. thereby speeding up their work,
- 3) Distributing radios to survivors,
- 4) Keeping a watchful eye on the changing situation in the evacuation centers and providing telecommunication technology assistance where necessary.

Fortunately, funding was approved by the NGO Japan Platform (JPF) for our assistance activities and on March 28th our aid started with the first support group of five people arriving in Tono which was to be the center of our activities.

We will now describe the construction of Internet environments in each of the disaster response control centers and evacuation centers.



Presentation ceremony of support equipment and supplies in Tono (March 29, 2011)



"Thank You, BHN," in front of welcome banner in Tono



Support goods carried to Tono from Tokyo by vans

### 3. Temporary Internet Environment and Remote Medical Support

BHN provided temporary Internet service in evacuation areas with the main objectives being the construction of health-tracking systems for elderly people and children, and a remote medical system using ICT technology thereby making at least some contribution to the local communities.

#### 3.1 System overview

Experiencing such unprecedented damage, the requests in the evacuation centers regarding telecommunication varied from day to day. At first, there was a focus on the gathering of information about the whereabouts of survivors and evacuation date in the evacuation centers. However, in the third week after the devastation took place, there was a complete change in the situation. The initial requests were for “Phones! Phones!” we heard everyday until then suddenly changed to requests for Internet access.

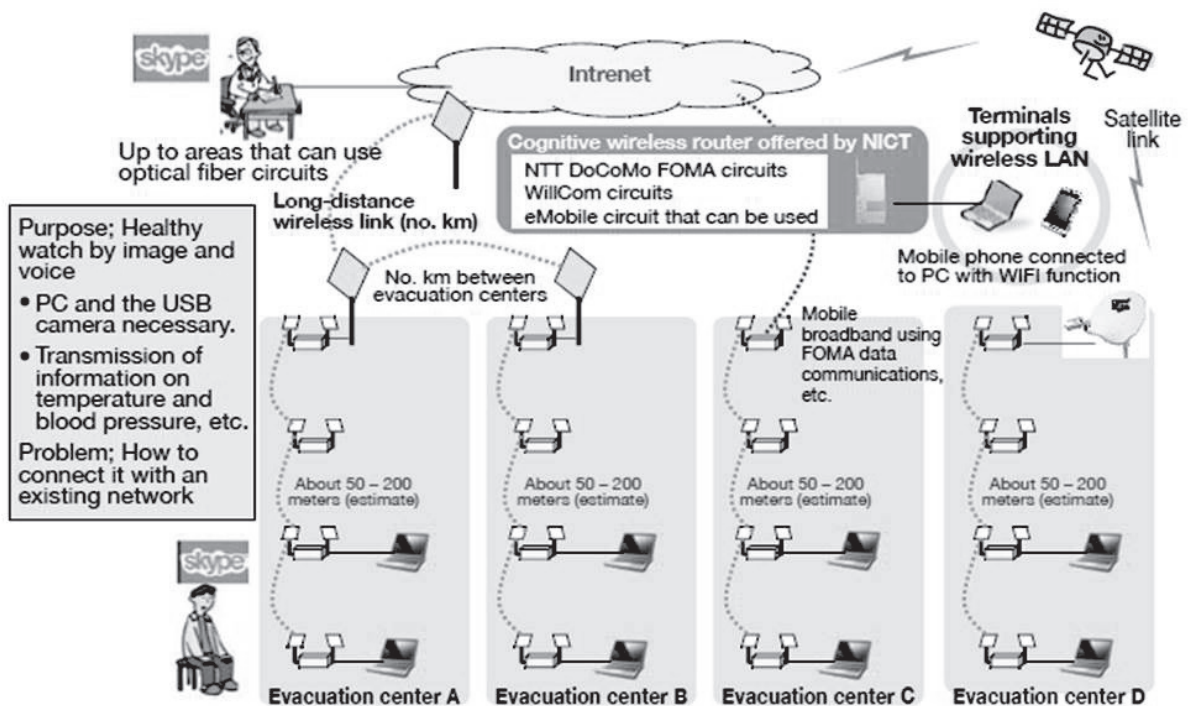
How to best construct Internet access lines in a disaster stricken area depends on how they can be connected to the existing local Internet network. Without fully understanding the telecommunication infrastructure situation in the area, BHN prepared equipment assuming three possible access methods:

- 1) Fixed Wireless Access (FWA) connection in areas 10 to 20 km away that had not suffered damage;
- 2) Connection to 3G mobile phone networks supporting high-speed data communication;
- 3) Construction of satellite communication circuits and then facilitation of these connections.

The earthquake and the tsunamis severely damaged the local telecommunications infrastructure, but the telecommunication network operators all launched great efforts to make repairs with NTT DOCOMO’s 3G mobile phone service being the first to get back to normal. In most of the evacuation centers that BHN visited in its assistance activities, NTT DOCOMO’s mobile phone service was already operating.

#### 3.2 Internet access using cognitive radio technology and mesh wireless technology

In Japan’s National Institute of Information and Communications Technology (NICT), research is being carried out on cognitive radio technology that aims to make it possible to handle and integrate different wireless systems thereby enabling more effective spectrum



Disaster-stricken area temporary Internet service assistance

utilization. In cooperation with NICT, BHN constructed an Internet environment in a short period of time using this technology together with mesh wireless technology.

In Otsuchi in Iwate Prefecture the fixed line network services could not be restored 100%, even in the disaster response control centers, and so in the evacuation centers in the devastated areas, telephone services were being offered but there was no Internet connection being offered which survivors could use. After first establishing an Internet environment using cognitive radio at a primary school that

was being used as an evacuation center, the first who jumped at it were junior high school students. This was the moment when they all began to feel the terror of the tsunamis once again as they watched news footage of the situation, and saw reports on the damages caused by the tsunamis on the Internet using the PCs offered by BHN. Others were acquiring information by connecting to the Internet via the wireless LAN with small handheld terminals as well as searching and browsing for information and the whereabouts of people and relief supplies.



First Evacuation center that started the Internet service  
(Ando Primary School in Otsuchi)



BHN staff explaining how to operate Internet

### 3.3 Communication system for tele-medicine

As was discovered after the Kobe earthquake, one of the problems of living in evacuation centers for a long time is health management, psychological support of the evacuees, as well as the need to promote communication within the disaster affected areas. To deal with these issues, BHN has come up with an interactive video conferencing system through which remote health consultations and psychological counseling can be offered using high-speed Internet circuits. In disaster stricken areas, right after the disaster, medical aid is offered by medical teams coming in from outside areas, but there are limits to the aid that can be given by such medical teams when stays in evacuation get

longer and longer. It is inevitable that the medical assistance shifts to remote medical aid. Skillfully understanding the situation and the fact that requests from people in the affected areas were changing day by day, we decided to adopt the mesh wireless technology (wireless ad hoc routers) as the most flexible telecommunication technology. This is a network that can adapt to different types of evacuation shelter environment, and to the shift in requests from initial big demand for telephones to Internet access, and can evolve to a system that can support evacuee communities even after temporary housing has been constructed.





Internet line opened in Ofunato Hospital



Audio-conference using Skype



Cognitive wireless router (Left) and mesh RMR router (Right)



Internet service in evacuation center and blood-pressure gauge

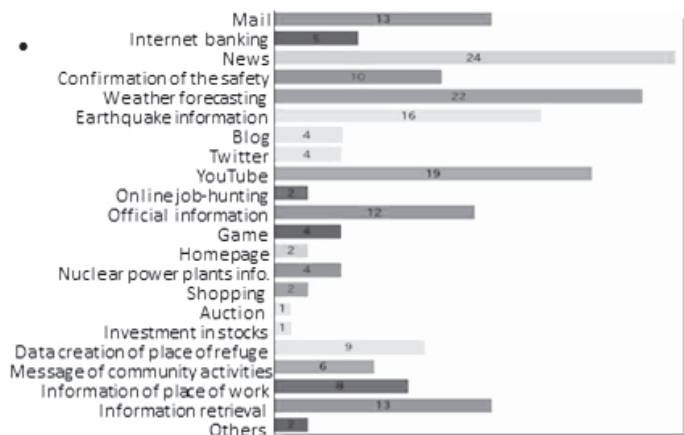
### 3.4 Internet users' comments and survey results

BHN provided support for Internet access, including the provision of personal computers. We started by enabling Internet access in evacuation centers, and then expanded our efforts to local centers, volunteer centers, and so on. Internet access assistance was provided in 67 places in total with the breakdown being as follows:

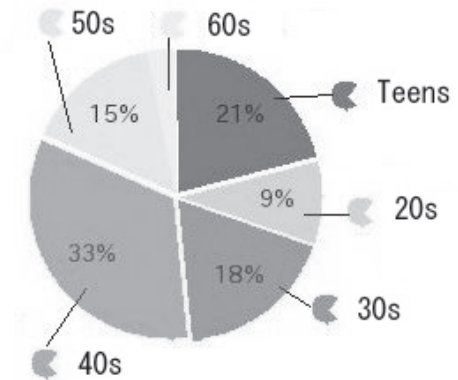
Places of refuge:	23 places (34.3%)
Local governments: (Disaster countermeasure offices and branch offices)	16 places (23.9%)
Relief organizations:	16 places (23.9%)
Schools:	6 places (9.0%)
Hospitals:	4 places (6.0%)
Others:	2 places (3.0%)
<hr/> Total:	<hr/> 67 places

Locations provided with Internet access

Survey by questionnaire carried out in late July, 2011, with 33 respondents (24 males and 9 females), responding to the question "What did you use the Internet for?" by selecting from multiple answers.



Internet usage



Age distribution of respondents

Comments from users of this Internet access included the following:

- 1) "I'm glad I could check the safety of friends and relatives and also collect other information."
- 2) "It is very convenient because I could see the situation in the affected areas. Because the recent change in the weather is severe, it is very useful to get the latest weather information in real-time."
- 3) "Since I couldn't use the Internet for work even in the evacuation center, nor was it possible to see the TV, etc., the Internet provided by BHN was very helpful. My life and work here have become more comfortable."

#### 4. Closing Remarks

BHN had mainly been active in developing countries until March 2011 but immediately initiated disaster relief activities in Tohoku not being able to overlook the damage caused by the great earthquake. Our emergency support activities lasted for about half a year until a number of evacuation centers were closed but it was a truly hectic experience every day. The survivors were very pleased that they could listen to the radio and have access to the Internet in the evacuation centers. We believe that it was really good to have carried out our support activities.

Once when we visited one of the devastated areas, we heard someone say "My mobile phone betrayed me during the disaster." They had always felt secure because they had their mobile phones nearby but from right after the great earthquake disaster for some days they couldn't use their mobile phones at all. It was a big shock for them.

We feel we are being asked what lessons are going to be learnt from this terrible disaster so that we can minimize the possibility of such a catastrophe ever happening again. Or should we simply treat it as something that happened and couldn't be avoided?

Nearly four years on from the great disaster, the reconstruction works are still continuing, and many survivors still have to live in temporary housing. We very much hope that the survivors will be able to resume the lives that they had been enjoying before the disaster as soon as possible.

## PART 2

### BHN Initiatives Supporting Temporary Disaster Radio Stations

**MASANORI NOMURA**, Board Member

**HIROFUMI AIZAWA**, Vice President

**MINAKO AKIBA**, Chief Project Officer

The first BHN aid initiative involving broadcasting stations was in Iran in the city of Bam after the earthquake of 2003. After that quake almost all the buildings were destroyed and we could not find any buildings with roofs where we could install the antennas and so we ended up purchasing a small van and used it as a transmitting station.

In 2004 after the earthquake and tsunami in Sumatra we built broadcasting stations in Sri Lanka and Aceh in Indonesia, and in 2011 when a huge earthquake devastated Haiti, BHN, in cooperation with the World Association of Community Radio Broadcasters (AMARC), rebuilt six damaged community broadcasting stations.

The support activities in this field that were launched following the Great East Japan Earthquake were the first experiences for BHN to conduct extensive activities covering many different areas.

#### 1. Initial Stage

The community radio stations in northern Japan that had suffered severe damage to their broadcasting facilities were quick to move to prepare equipment for broadcasting in the damaged areas. With this equipment many Temporary Disaster Radio Stations (TDRS) were started in the towns where there had been no community radio stations before.

In order to start operating a broadcasting station, a big effort is necessary to employ and train staff members without any radio experience. In those areas where there used to be community radio stations, they temporarily altered their legal status (both commercial & governmental) to TDRS.

The legal status of Community Radio Stations is the same as that of other normal Radio Broadcasting Stations. However, regulations regarding the creation and operation of TDRS are less strict as they were regarded as going to be operational only for a few months or, at the longest, for one year. Now that the operating period has lasted over four years, these stations are being requested to alter their status to the Community Radio Stations.

#### 2. BHN Initiatives

Most of the TDRS aimed to open as early as possible but they had to confront many operational problems; many places in the service area were left with bad radio receptivity; the equipment were not sufficient or not stable, etc. To resolve these problems BHN carried out the following support work for TDRS:

##### (1) Minami-Sanriku TDRS in Miyagi Prefecture

When BHN did some research in May it found that only about half of the town had good radio receptivity. The town was created as a result of the merger of two towns and, in between the two original towns, there lies a series of hills and the radio broadcasting antenna was located on one side of the town.

We moved the antenna from that location to the top of a hill to command both of the old towns and installed a relay system to connect the studio and the antenna. This was BHN's first undertaking of repair & improvement works for broadcasting stations.

##### (2) Ohtsuchi TDRS in Iwate Prefecture

The town of Ohtsuchi is in one of the most heavily damaged areas. When the town management were all together discussing measures to repair the damage, they were hit by the tsunami attacked them and, thus, the opening of the TDRS was delayed until the end of March 2012. Another reason for the delay in the opening of the station was that the town is made up of hills and small bays and therefore this problem of radio receptivity still remains to be solved.

The radio station is located in the shopping mall that was hit by the tsunami and so when an evacuation warning is issued, the studio moves to the town office. However, the town office is located near Ohtsuchi river and, in case of emergency, it is planned to move the town office to the public hall located on a hill.



### **(3) Rikuzen-Takata TDRS in Iwate Prefecture**

This town became famous for its “lonely pine tree” left on the beach after the tsunami as a symbol of the devastation. Soon after the disaster struck, a NGO called “aid TAKATA” was founded and this NGO started to operate a TDRS using borrowed broadcasting equipment.

BHN donated broadcasting equipment to replace the borrowed equipment and built a radio relay circuit to connect the studio and the radio antenna.

### **(4) Watari TDRS in Miyagi Prefecture**

The geographical features of the town are not very complicated and a broadcasting antenna was set up on the roof of the town office. However, many locations in the town are out of the reach of the radio waves, especially in many of the temporary housing facilities.

To overcome the problems caused by poor radio receptivity, BHN worked to install boosting equipment in individual temporary housing facilities and moved the broadcasting antenna to a hilltop.

### **(5) Yamamoto TDRS in Miyagi Prefecture**

Located next to the south of Watari, Yamamoto started its TDRS very soon after the disaster but there are many small hills in the town and, especially in the temporary refugee facilities, how to improve the radio wave reception was a serious problem. BHN worked to install boosters to individual temporary housing and installed collective antennas in other locations.

### **(6) Natori TDRS in Miyagi Prefecture**

In April 2011, soon after the disaster, a TDRS started with the help of experienced people from Tokyo who were born in or once lived in Natori. After some time it was decided to operate it with its own staff and install new equipment and build a new studio with soundproof chambers and connect the studio with an emergency studio located in the city hall. BHN worked as a consultant to design and procure all the broadcasting facilities. Natori TDRS is now preparing to remodel itself as a community radio broadcasting station.

### **(7) Minami-Soma TDRS in Fukushima Prefecture**

The main service area of the Minami-Soma TDRS is divided into three - north, middle and south - but the areas are separated by hills and the broadcasting antenna was located in

the middle region. However, the south region (Odaka region) was assigned as an evacuation area due to the atomic reactor accident and most of the citizens were moved to the temporary housing in the north (Kashima) region. To solve the radio receptivity problem became an urgent task.

Although there were many problems, we decided to move the broadcasting antenna to the top of a mountain located to the west of the city and borrowed a tower for it. The biggest problem was that the road leading up to the top of the mountain had collapsed due to heavy rain and we had to physically carry the heavy equipment up the mountain. The radio waves now cover all three regions of the city.

## **3. Future of TDRS in disaster areas**

A long journey still remains before the damaged cities and towns can be said to be recovered. Each TDRS is choosing its own future depending on its background.

### **(1) Possible closure**

The stations that were originally community broadcasting radio stations are returning to being what they were originally - community radio stations.

TDRS are basically maintained by the financial support from municipalities and to alter them to community radio stations further financial support will be necessary. However, it will be difficult to increase municipal financial support and many private enterprises that used to buy commercial air time were damaged by the disaster. Accordingly, some of the municipalities may have to close their radio stations.

### **(2) Possible survival as community radio stations**

Many municipalities highly evaluate the functions of TDRS and many citizens are still residing in temporary housing. Although there exist financial problems some of the municipalities are planning to convert their TDRS into community radio stations.

## **4. Closing remarks**

There are tens of thousands of community radio stations in the world and, for all of them, financial issues are the largest concerns. Thus, in many countries, the governments are classifying community radio stations as a 3rd media of communications (i.e. neither governmental nor commercial) and financial support is also being given to them.

Thinking of the future of TDRS in general, we wish to close this report with the following excerpt from the report of the IBRD (World Bank) & IMF which was presented to the extraordinary general assembly in 2012 in Sendai:

*"Social media were extensively used for searches, rescues, and fundraising. Social media are Web-based applications that use the Internet to connect people (prominent examples are Twitter and Facebook) as well as Web sites and computer applications that enable users to collaborate and create content, such as Wikipedia and YouTube. Emergency FM radio also played a crucial role in the aftermath of the GEJE\*. When the emergency communication systems in many cities broke down because of power failures and lack of emergency backup power, community radio stations were able to get useful information out to residents. In fact, about 20 emergency broadcasting stations dedicated to disseminating disaster information were set up in the Tohoku area. In the immediate aftermath of the disaster, these community radio stations began to provide information about times and locations for the distribution of emergency food, water, and goods. In the following months they gradually shifted to providing other information to help victims in their daily lives or to raise the spirits of people in local communities. Radio was particularly appreciated by the elderly, who were less likely than younger people to have access to Internet information."*

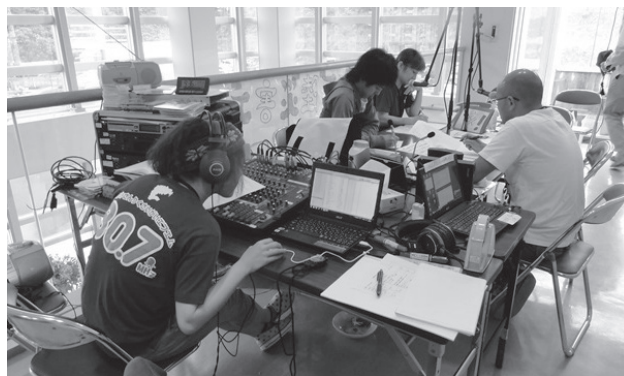
\*Great East Japan Earthquake

**Postscript:**

On May 25 2012 BHN was presented with a special Letter of Appreciation for its work in Tohoku from the Central Emergency Radio Communications Conference, which is a governmental organization for emergency radio communications in Japan.



Work to overcome reception difficulty



Ad hoc studio in open space in town office



Training for new staff

## PART 3

### BHN Assistance to Residents of Iitate Village in Fukushima Prefecture Forced to Evacuate due to Fukushima Daiichi Nuclear Power Station Disaster

YOSHIHIRO YOSHIOKA, Counselor  
SATOSHI FUJITA, President

#### 1. Introduction

Iitate village used to be a beautiful and peaceful agricultural village with 6,000 residents and it was acclaimed as one of “The Most Beautiful Villages in the World.”



Iitate Village  
(picture copied from village Homepage)

Tragically, although it is located more than 30 km north of the nuclear plant, the strong south-east wind and heavy snow soon after the nuclear plant accident which occurred one day after the Great East Japan Earthquake exposed Iitate to high levels of radiation.

Iitate’s residents were not initially ordered to evacuate the village because it was not within the 30 km evacuation zone declared by the Japanese government. As a result the evacuation of Iitate did not take place for one month, which increased their exposure to high radiation levels and also put them at a severe disadvantage when it came to finding appropriate evacuation accommodation.

It may also be worthwhile noting that this idyllic village had never received any benefits from Tokyo Electric Power’s decision to build its nuclear plants nearby owing to its relative distance from the facilities. Nevertheless, in 2011 it became one of the places worst-affected by the accident.

#### 2. PHASE 1: Communication network support to evacuees

The initial phase of BHN’s assistance was to provide Internet access, video phones and teleconferencing systems in the 29 evacuation facilities Iitate’s villagers moved into in response to a request from the village’s mayor, Norio Kanno. He asked for communication networks to be set up to enable the scattered villagers to communicate with each other and



Discussing communication support to evacuees with village official

also to receive information from the village office. The facilities to be covered included old and new village offices, evacuated infant schools, two temporary kindergartens, a temporary elementary school to accommodate four old schools, a special junior high school for evacuees, a temporary high school, a nursing facility for the elderly, and the meeting rooms and community offices in temporary group housing facilities in 20 locations. In addition, BHN provided ICT training more than 100 times over 10 months to older people and those who did not have a good knowledge of ICT through PC and mobile phone classes. BHN also provided copy machines and printers to enable the provision of village newsheets and community notices about various events and other information. BHN staff also supported the creation of home pages in 10 of these new communities.

BHN also provided health care facilities including weight and blood pressure measuring systems, thermometers and remote health consultation systems in all evacuee locations in order to help evaluate the health of evacuated villagers who no longer had farms to work on



and did much less exercise than normal as well as being under a lot of stress and pressure, such as three generations of families being split up.

This first phase was partly made possible by aid from JPF (Japan Platform) and four volunteers from Fukushima City, headed by Shuichi Maruyama, were the main engine of its implementation.

The remote health support systems, however, were not well utilized because of the lack of nurses and doctors, which brought about the next phase in BHN's support.

## 2. PHASE 2: Health support to litate patrol teams

In order to cope with health issues caused by the evacuation, BHN asked another NGO called Humanitarian Medical Assistance (HuMA) to co-manage the second phase of its assistance. HuMA is composed of doctors and nurses from all over Japan and provides emergency medical support to those affected by natural disasters - mostly overseas but also in Japan.

Because of the lack of nurses and doctors, there was almost no specialist health care available apart from radiation care for the litate patrol team consisting of about 400 villagers who patrolled the empty and highly radioactive old village day and night wearing radiation meters.

Many members of the team experienced increases in weight and blood pressure and they were also suffering heavy levels of stress due to being unable to do their normal work on their farms, to living in small temporary homes, to eating high calorie lunch boxes instead of their normal home-made dishes, and due to their lack of exercise. Volunteer HuMA doctors and nurses, who have normal weekday jobs, provided the health consultations every other weekend in Iitate.

Meanwhile, BHN continued to provide support for the health consultation systems installed in the first phase and also provided pedometers with ID functions which encouraged exercise and walking. Also exercise training sessions given by specially invited trainers were held. The Thai massages provided by a volunteer professional specialist were especially highly evaluated. In addition, coffee from El Salvador provided by UCC Holdings were served by BHN members in the waiting rooms and drinking this coffee has become a much loved habit for those about to go out on or returning from patrols in Iitate.

This phase was supported by JPF from May to December 2012, and continued using BHN's own funds and also by the support from DOCOMO's points donations until the

end of March 2013. These activities are still continuing but are currently funded by Iitate village itself.



Health consultation



Health consultation system at "Ichiban-kan" building lobby



Compensating for lack of exercise

### 3. PHASE 3: Health support for those evacuees living in individually leased houses

Another support activity for the village of Iitate was to provide health support to those evacuees living in individually leased houses. About 4,000 citizens (1,700 households), or two thirds of the evacuated people live not in group temporary housing facilities but in houses temporarily leased by each family.

This phase focused on the following two activities:

#### 1) Health support at get-together tea parties arranged by Iitate's Council of Social Welfare (CSW).

CSW holds a get-together tea party in each evacuee community in the cities of Fukushima, Date, and Minami-Soma, as well as in the town of Kawamata, every other month to encourage communication among the villagers and to provide consultations and assistance. BHN provided pedometers encouraged walking and exercise, and also helped the evacuees to record and chart their walking history. Prizes in the form of locally-made healthy candies were given to those who set walking records. This project was started in October 2012 and initially financed by BHN's own funds. From July 2013 to March 2014 JPF aid covered the costs, and it is today being continued using funds raised by various supporters of BHN. In March 2014 BHN received an official commendation from Fukushima Council of Social Welfare for these activities.

#### 2) Support for Iitate evacuee neighborhood community associations

BHN has also provided health consultations, Thai massage services and gifts of pedometers to the evacuees from Iitate living in leased homes in collaboration with three neighborhood community associations in Date, Minami-Soma and in Kawamata which number 98, 138 and 270 households respectively.

These activities are similar to the assistance provided to the Iitate patrol team and were supported by HuMA, the Thai massage specialist, Maki Sato, and JPF aid.

### 4. Other supports to students

BHN also provided two types of assistance to evacuee students.

#### 1) PC donations to Soma Agricultural High School Iitate Campus

This campus was moved from Iitate village



Thai massage



Coffee service



Get-together tea party



Health consultation by doctors and nurses

to a temporary school premises in Fukushima Meisei High School. Since the school had only a few PCs, the donation of 30 PCs by Symantec Japan which was arranged by BHN in October 2013 was warmly welcomed by all the students and teachers. They are being used for studies and various other purposes including job hunting.

## 2) Video Class from Japanese Antarctic wintering party

One of the core members of BHN Iitate team, Takashi Yokono, used to be a member of the wintering team and supported this special live class together with another ex-wintering team member, a journalist of Asahi Shinbun (Newspaper.) The Captain of the 54th Japan wintering team and other members explained their activities and the climate in the Antarctica to the students of the three evacuated elementary schools of the village and had a very active Q&A session on November 27, 2013.



Students web surfing with donated PCs

## 5. Iitate now and in the future

Iitate is still in the midst of radioactive decontamination activities involving about 7,500 workers and radiation in the air seems to be almost one fourth or one fifth of what it was but the lifting of the evacuation order still remains undecided. The village has a revitalization plan which consists of six projects including the construction of houses in the old village for the returning evacuees and other support to fulfill the needs of the villagers. Also various self-assistance activities are ongoing by new community associations and CSW including efforts to re-establish agriculture activities. The focus of interest for evacuees varies according to generation. Young families

are focused more on building lives in new locations because of worries about the health of the children and jobs while the older people seem more eager to return to the old village. The sincere efforts being made by all villagers made us determined to continue our support as long as possible.

In summary, BHN provided communication networks in 29 evacuee facilities, health consultations for 740 people in total, 600 pedometers, and, in addition, a cumulative total number of 620 people received Thai massages as of the end of October 2014. BHN has determined to continue our support for the year 2015 at least.

We at BHN would like to express our deep appreciation for all the support and cooperation we received from Iitate's mayor, the village officials, and CSW, and for all the assistance provided by JPF, NTT East, NTT DOCOMO, NTT IT, Symantec and Microsoft.

We are also very grateful for the wonderful support we received from our partner, HuMA (President Dr. Kazuhiko Maekawa and HuMA's numerous doctors and nurses) and from Ms. Maki Sato, the Thai massage specialist, and the following BHN members:

Project leaders: Satoshi Fujita, and Yoshihiro Yoshioka

Fukushima residents support team: Shuichi Maruyama, Ikuo Ogasawara, Kenichi Kikuta, and Chiharu Ito

Core implementation promoters: Akito Hata, Takashi Yokono and Yoshiaki Yugen

BHN Tokyo staff: Minako Akiba, Mika Kobayashi and Toshikazu Kimura



## PART 4

### ICT Training and Job Assistance Provided by BHN Association in Miyagi Prefecture in Areas Affected by Great East Japan Earthquake

**SHUJI ARIMA**, Counsellor  
**MASANORI SATOU**, Chairman

#### 1. Introduction

On March 11, 2011 the Great East Japan Earthquake occurred off the coast of Miyagi Prefecture in Japan's Tohoku region causing terrible destruction and devastation to the coastal areas of Tohoku with the city of Ishinomaki in Miyagi Prefecture being the largest of the affected areas.

In response to requests for support and cooperation from the local government in Ishinomaki and some local NPOs, the BHN Association carried out a survey to ascertain the needs of the survivors, and discovered that job creation in the affected areas and job finding for the survivors were the most important needs, and that survivors wanted to acquire skills that would enable them to find jobs more easily.

Mr. Masanori Satou, Chairman (at that time, a Vice President) of the BHN Association took the main leadership role as the Leader of BHN's Miyagi Support Activities, together with Mr. Hachihei Kurematsu, Vice President of the BHN Association.



Ishinomaki in Miyagi Prefecture suffered severely in Great East Japan Earthquake

#### 2. “Volunteer Communication Center” and “Telework Center”

The BHN Association opened a Volunteer Communication Center and a Telework Center in Ishinomaki Senshu University, in cooperation with the Japan Telework Association. By using these centers as bases, the BHN Association's staff, directly visited the affected areas, provided support for the utilization of personal computers (PC) by the residents in several temporary community centers and promoted “Telwork methods” for small and medium-sized enterprises in the affected areas.



Ishinomaki Volunteer Communication Center and  
Telework Center



Temporary Community Center in Ishinomaki

In line with other major initiatives for the recovery and reconstruction in these affected areas, the BHN Association opened its BHN Miyagi office in April 2012 on the 2nd Floor of Ito-Gijuku, Yamoto, in Higashi-matsushima, Miyagi Prefecture, and started to broaden its support activities which included “PC Hobby Classes” which anyone could participate in, and a “PC Library” where anyone could borrow a PC.

### 3. “PC Course for the Elderly” and “Job Assistance Course”

The “PC Hobby Classes” developed into “PC classes for the Elderly,” “Job Assistance PC Classrooms” and “Ishinomaki Senshu University ICT Open College”.

Onagawa town in Miyagi Prefecture requested the BHN Association to send PC lecturers for its “Onagawa PC classes for the Elderly/IT Course (Plala),” targeting elderly people over sixty year of age living in the town. The IT course (Plala), which was held in the multi-purpose hall on the second floor of Onagawa Community Welfare Center that was built on the hill overlooking the Onagawa Port, gave a high degree of satisfaction and sense of accomplishment to the senior participants. Moreover, to see senior citizens learning new ICT tools happily and in lively spirit strengthened the hope and courage of people of all generations in the affected areas.

The BHN Association also opened “Job Assistance PC Classrooms” in the daytime in Tome, Miyagi Prefecture, while for those who held daytime jobs, the BHN Association opened night classes in Minami-Sanriku, also in Miyagi Prefecture.



BHN's Miyagi office in Higashi-Matsushima



PC Hobby Classroom



Onagawa PC classes for Elderly / IT Course Plala

#### 4. Ishinomaki Senshu University ICT Open College

“Ishinomaki Senshu University ICT Open College Phase I” (August 21, 2012 - November 13, 25 days, 30 participants) was inaugurated on August 21, 2012 at the Ishinomaki Shinkin Bank head office building in the center of Ishinomaki in Miyagi Prefecture. This Open College was jointly organized by the BHN Association and Ishinomaki Senshu University, and aimed to support the recovery of small and medium-sized enterprises in the affected area as well as enabling disaster survivors to improve their computer skills so that they could take advantage of their skills and find new jobs.



Address by Dr. Sakata, President, Ishinomaki Senshu University



Address by Dr. Kuwabara, BHN Chairman (now, Honorary Advisor)



Textbooks



Class 1



Class 2



Graduates

#### ***Ishinomaki Senshu University ICT Open College Phase I***

“Ishinomaki Senshu University ICT Open College Phase II,” Advanced Course (February 4, 2013 – March 25, 7 days, 10 participants) and Basic Course (February 5, 2013 – March 26, 15 days, 34 participants) were carried out successfully at the Ishinomaki Renaissance building in Ishinomaki.



Prof. Wakatsuki at Advanced Course Opening



Basic Course class



Basic Course graduates

#### ***Ishinomaki Senshu University ICT Open College Phase II***

The ICT Open College in 2013 firstly conducted IT Hands-on training courses for people engaged in the fishing industry in small fishing villages such as Sasuno-hama (15 days), Higasi-hama (12 days) and Oohara-hama (12 days) in the Ojika-Peninsula in Miyagi Prefecture from April to September, with each class having two to five participants. These were very small-scale training courses but the motivation of the participants was high and the effect of the training was substantial.





Sasuno-Hama class



Higasi-Hama class



Oohara-Hama class

### ***IT Hands-on training courses in small fishing villages***

“Ishinomaki Senshu University ICT Open College Phase III” (October 3 – November 29 2013, 17 days, 30 participants) was carried out successfully at the Ishinomaki Shinkin Bank head office. In addition, a study room enabling eager students to study by themselves was also prepared in



Class 1



Closing ceremony



### ***Ishinomaki Senshu University ICT Open College Phase III***

the Ishinomaki Renaissance building.

Each phase of Ishinomaki Senshu University ICT Open College included lectures on Microsoft Office Software and lectures on teleworking and security with each being supported by the lecturers invited from the Japan Telework Association and Symantec. NTT Data dispatched five or six company employee volunteers from all over Japan everyday during the ICT Open College to serve as personal tutors thus strongly contributing to the success of the ICT Open College. Ishinomaki Senshu University also sent between two and seven graduate students as student volunteer tutors. ICT Open College Phases I, II and III each gave a lot of satisfaction and a sense of accomplishment to the participants.

#### **5. Closing remarks**

In 2014 and 2015, Ishinomaki Senshu University and Fukko-Daigaku are the main organizations running the Ishinomaki Senshu University ICT Open College. The BHN Association continues to give some support to the Open College such as by lending 40 training PCs. The recovery and reconstruction of the disaster stricken areas is gradually progressing but a lot of new difficulties may emerge as time elapses. We sincerely hope that the new ICT tools and training will help the survivors of the disaster to regain something approaching their former normal life styles.



Ishinomaki Senshu University ICT Open College Phase III graduates and supporters

## PART 5

# Recovery Support Activities in Ishinomaki and Other Parts of Miyagi Prefecture Affected by Great East Japan Earthquake Using “Designated Donations”

SHUJI ARIMA, Counselor  
MASANORI SATOU, Chairman

### 1. Introduction

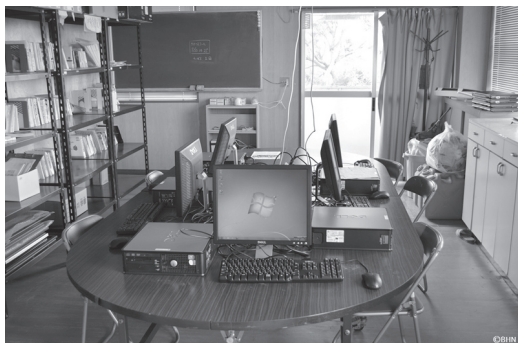
In July 2012, the BHN Association launched its ICT (Information Communication Technology) support activities in the temporary housing facilities in communities in the disaster areas by utilizing the designated donations for restoration from the Great East Japan Earthquake. These support activities were firstly carried out in the city of Higashi-Matsushima, and then extended to Ishinomaki, Tome and Minami-Sanriku in Miyagi Prefecture until the end of December 2014.

### 2. “Local Community Support Activities” in Higashi-Matsushima, in Miyagi Prefecture

After opening its BHN Miyagi office in April 2012, on the 2nd Floor of Ito-Gijuku, Yamoto, Higashi-Matsushima, Miyagi Prefecture, the BHN Association started to install Internet connections to the meeting rooms of several temporary housing facilities in Higashi-Matsushima, thereby helping the residents improve their communication capabilities by connecting digital equipment, such as mobile internet devices, personal computers, printers, etc. to the Internet. The BHN Association has received a lot of positive responses from the residents regarding this initiative.



Local community support activities in temporary housing facilities in Higashi-Matsushima



BHN Miyagi office opened to local people

### 3. Support for FTTH (Fiber-to-the-Home/Optical-Internet) Installations

After receiving various verbal requests and letters from several representatives of the temporary housing residents' associations and the Local Government in Ishinomaki, the BHN Association decided to respond to these requests by providing technical and financial support for the installation of FTTH in Ishinomaki, Tome and Minami-Sanriku.



Ishinomaki Temporary Housing Residents' Association



Oohashi Temporary Housing



Mr. Ishigaki, BHN Miyagi Office Manager

Support for FTTH installation started in April 2013 and was completed in 20 places in Ishinomaki, and in five places in Tome and Minami-Sanriku by the end of August 2013. Conversion of the existing Internet connections to FTTH in Higashi-Matsushima was also completed in three places by the end of June 2013.

In addition to the above, in places where support for FTTH introduction had been offered by other organizations, PCs and printers were rented by the BHN Association for seven sites in Ishinomaki and five in Higashi-Matsushima before the end of August 2013. In total, the BHN Association has provided technical and financial support in 40 sites, and helped improve communication capabilities, taking advantage of the designated donations for recovery from the Great East Japan Earthquake.

After each installation was completed, the BHN Association invited representatives of the temporary housing residents' association to participate in a basic PC training course, where they could learn how to send and receive e-mails, web-surf and web-search. The BHN Association held a total of 69 such PC training courses up to the end of October 2013.



Temporary Housing Meeting Hall and IT equipment with optical-Internet Connection



#### 4. Survey Results

In October 2013, just 6 months after support for FTTH installations started, the BHN Association made a survey to see how the digital equipment installed in the temporary housing facilities is being used and to collect new requests from the representatives of the temporary housing residents' association.

The results showed that BHN Association's support was regarded as being very useful for residents, enabling them to improve communication within their communities and with the outside world. In addition, many of the representatives asked us to continue making frequent visits to the temporary housing sites and to open more advanced PC training courses.

The BHN Association made a total of 115 visits to the temporary housing sites to check if there were any problems with the digital equipment and/or the Internet connections. The BHN Association also held a total of 38 advanced PC training classes in the meeting halls of the temporary housing sites during the 14 months between November 2013 and December 2014.

#### 5. Closing remarks

The BHN Association's support activities using the money donated to BHN through the tax-exempt "designated donations" for the recovery and reconstruction of areas damaged by the Great East Japan Earthquake were officially concluded at the end of December 2014. However, the BHN Association continues partial support activities such as lending PCs and printers to the residents of the temporary housing facilities wishing to continue using them even after the BHN Association's official support had ended. In addition, the BHN Association is planning to continue using the BHN Miyagi office and to continue its support activities until the end of December 2015. Although reconstruction work in the areas hit by the disaster is gradually making progress, a lot of new difficulties may still emerge before reconstruction is completed. We hope that the survivors of the disaster will continue to make use of the new IT Communication tools with which they have been improving their skills in the temporary housing facilities and that they will be able to help restore their everyday lives to near normal as soon as possible.



Visits to temporary housing sites and PC training courses

## Let's talk about BHN's Support Activities over the Years

### TAKEO NOBUSAWA

Honorary Advisor



*Interviewer:* It's already more than 20 years since the BHN Association was founded. Wasn't it's first big project helping survivors of the Chernobyl nuclear accident?

*Myself:* Yes, you are correct! The BHN Association started as an NGO in 1992 in response to a call made by the ITU in 1984 to try to overcome the digital divide and realize a world where anyone anywhere in the world can use a phone. The BHN Association has been engaged in "Telecom Red Cross" activities, so to speak, and as you say, its first project was to build a 120 km long microwave link between Moscow a sanatorium in Obnisk to enable tele-diagnosis of patients. BHN's focus in general has been on humanitarian support, especially in South East Asia, such as helping to link hospitals and remote clinics using telecommunications technology, and on developing human resources in that field such as the training and nurturing of young ICT executives.

*Interviewer:* So, is it true that, at first, activities such as emergency disaster relief activities were not considered?

*Myself:* Frankly speaking, when the Hanshin-Awaji Great Earthquake occurred in 1995, we were so occupied with our projects in other countries in Asia, that we were unable to directly extend any help to the survivors of that earthquake. However, that was the moment when we started to realize that providing emergency relief overseas might be one of the important roles that we should take on. Accordingly, we then divided our humanitarian support into two categories: grass-roots support and emergency relief activities. The fact that we succeeded in providing some timely support to survivors of the typhoon in Honduras in 1998 and the earthquake in Turkey in 1998 owes something to the lessons we acquired in the aftermath of the Great Hanshin-Awaji Earthquake.

*Interviewer:* When you use the word "disaster," there are natural disasters such as earthquakes and there are also man-made disasters such

as international wars and civil wars. Has the BHN Association been addressing both kinds of disasters?

*Myself:* Yes, we have. Firstly, in case of man-made disasters, we started helping refugees in the refugee camps in Afghanistan and Iraq in 2000, but it was not easy and there were many dangerous incidents. When our support team arrived in Kabul, for example, the first news they heard was that there had been a suicide bombing in the town the previous day, and that three people had been killed. When our local office in Kandahar was attacked by a mob of people throwing stones, fortunately, our staff were outside the office and safe. The car of another NGO we were working with was stolen together with everything inside it. Notwithstanding all these difficulties, one of our support team members told me how very deeply he was moved when an old refugee, after having succeeded in talking to one of his family members in some distant place using one of our satellite-phones, told him that he was so happy that he said there is nothing else he wished for in his life. In this context, I think we should not forget that the fact that our members have attended emergency relief training courses organized by UNHCR to develop their skills has greatly contributed to the success of our activities.

*Interviewer:* The BHN Association's emergency relief activities in relation to natural disasters in Iran, Sumatra, Myanmar, the Philippines and other places seem to have been tough too, don't they?

*Myself:* I think we have improved our skills as we have conducted more and more of these activities. We first started by offering satellite-phone services so that the refugees can find the whereabouts of the families and friends, but soon we found that there were such demands as, "I want to know when the relief goods will arrive and I want to know where I can get such information" and "I want to have a radio receiver to get information." In addition, there are many other requests we can get only if we were actually there in the affected area such

as, "Could you teach me how to use the PC?" and "I need stationary, mosquito bed nets, etc." Our staff made efforts to fulfill these kinds of requests. I think all these experiences helped us a lot in mobilizing our support activities this time in the Great East Japan earthquake.

*Interviewer:* So, it was based on these experiences and achievements abroad that you launched BHN's emergency relief activities for the survivors of the Great East Japan Earthquake. Is that right?

*Myself:* If I remember correctly, we did provide a modest amount of support to people affected by the Niigata Prefecture Chuetsu Earthquake that occurred in 2004, which was the first time that we helped people affected by a natural disaster in Japan. However, the Great East Japan earthquake was the first full-scale project to support relief activities inside Japan.

When that earthquake struck, it so happened that Dr. Kawahara, a doctor engaged in medical support activities in Africa, was in our office for a meeting. When the main tremor was over, he immediately said "I have a friend in the affected area who is a doctor. I must go and help him." Therefore, a member of our secretariat contacted Dr. Ohtsubo, a BHN Association Board member, and asked him to lend his hospital's ambulance to the BHN Association and using this ambulance driven by one of our members, Dr. Kawahara's team rushed to the city of Natori in Miyagi prefecture to join the emergency medical relief efforts. Dr. Kawahara left for Africa again the next day after he returned from Natori. I think that the fact that our secretariat members acted so swiftly without waiting for any official decisions to be made by our organization is a wonderful example of the reliability and flexibility inherent to an NGO.

*Interviewer:* I was not aware before but I was told recently that Ms. Tokiko Kato, a famous Japanese singer, is also a strong supporter of the BHN Association.

*Myself:* We have a long relationship with Ms. Kato, who is currently a Board member of the BHN Association. How this happened goes back to the days of our assistance to refugees in Afghanistan. Having heard that the BHN Association was helping Afghan refugees, Ms. Kato promised to collaborate with us and offered to give concert in Afghanistan in the summer of 2002 to cheer up the refugees. We immediately began to make arrangements

to hold this concert, but, unfortunately, the preparations were interrupted because of the passing away of Ms. Kato's husband, and eventually, we had to give up our plan because of the security situation in Afghanistan got worse and worse. Ms. Kato was sad that she could not hold that concert, and perhaps it is not nice to call it a kind of compensation but, she has sung at many of our charity concerts since 2010.

Because of this remarkable beginning to our relationship, Ms Kato and BHN have become very close, and we really appreciate the importance that Ms. Kato puts on her support of the activities of the BHN Association. After the Great East Japan earthquake occurred, in addition to visiting the disaster stricken areas, she has donated much of the money she she raised in her charity concerts. She is certainly one of the strongest supporters of the BHN Association.

*Interviewer:* We can never get rid of disasters, whether natural or man-made and so I guess the roles played by NGOs like yours will get bigger and bigger.

*Myself:* In order to continue our activities to help people suffering in the aftermath of disasters, we need to foster people who are willing and ready to put their energy and enthusiasm into such activities. Not only the members of our secretariat, but I hope that graduates of our HRD Program will develop into key players, working alongside the members of our secretariat, in our support and relief activities in times of emergencies and disasters.

I am now retired and can offer only spiritual support but I will be watching the activities of the BHN Association with great interest and expectation.



# Appendices

## APPENDIX 1

### Damage Caused by Great East Japan Earthquake

#### 1. Scale of Great East Japan Earthquake disaster

Item	Great East Japan Earthquake	Great Hanshin Awaji Earthquake
Date & time:	14:46 on March 11 2011	05:46 on January 17 1995
Epicenter:	Pacific Ocean 130 km off Tohoku's Sanriku coast 24 km underground	In the Akashi Channel north of Awaji Island 16 km underground
Seismic intensity:	Magnitude 9.0	Magnitude 7.2
Type:	Trench-type	Plate movement
Areas affected:	Widespread disaster with earthquake, followed by tsunamis and nuclear power plant damage.	Inland
Main cause of death:	More than 90% of casualties caused by drowning	More than 80% of casualties caused by collapsing buildings

Note: Characteristics of Japan's two biggest recent earthquakes were very different and most remarkable feature of Great East Japan Earthquake is that over 90% of victims died by drowning.

Table 1: Scale of Great East Japan Earthquake compared with 1995 Great Hanshin-Awaji Earthquake

#### 2. Location of Great East Japan Earthquake epicenter



### 3. Loss of life and basic damage caused by Great East Japan Earthquake

Item	Great East Japan Earthquake				Great Hanshin Awaji Earthquake
	Iwate	Miyagi	Fukushima	Nationwide	
No. of deaths	4,671	9,517	1,605	15,859	6,434
No. of missing persons	1,222	1,581	214	3,021	3
No. of collapsed, & half-collapsed houses	24,877	232,553	89,080	388,505	255,326
Debris (tons)	4.49 million	15.7 million	2.25 million	26.73 million	20.00 million

Table 2: Loss of life and material damage caused by Great East Japan and Great Hanshin-Awaji Earthquakes

Item	Fukushima Nuclear Power Plant	Chernobyl Nuclear Power Plant
Date	March 11, 2011	April 26, 1986
Cause	Hydrogen explosion	Meltdown & explosion
No. of deaths due to explosion	2	33
No. of evacuees	More than 113,000 within 20 km radius of plant	135,000

Table 3: Characteristics of Fukushima Nuclear Power Plant and Chernobyl Nuclear Power Plant disaster

### 4. Damage to telecommunications infrastructure

#### 1) Fixed line infrastructure (NTT)

	Great East Japan Earthquake	Great Hanshin-Awaji Earthquake
Date:	March 11, 2011	January 17, 1995
Traffic at peak:	approx. 9 fold	approx. 50 fold
Damaged lines:	approx. 1.5 million	approx. 285,000
Time required to restore services:	approx. 50 days (excluding nuclear power plant area and evacuated area)	approx. 2 weeks (excluding totally destroyed buildings or houses)
Equipment/damaged trunk lines:	approx. 90 routes (excluding nuclear power plant area)	—
Exchange buildings:	18 completely destroyed, 23 flooded	—
Telephone poles:	approx. 65,000 destroyed in coastal areas	approx. 3,600
Aerial cables:	approx. 6,300 km destroyed in coastal areas	approx. 330km

Table 4: Impact of Great East Japan Earthquake disaster on core fixed-line infrastructure (compared with that of Great Hanshin-Awaji Earthquake)

#### 2) Mobile infrastructure

Item	Great East Japan Earthquake	Great Hanshin-Awaji Earthquake
No. of base stations out of operation:	29,000	145
Time to restore services:	Mostly restored by the end of April	Mostly restored by January

Table 5: Impact of Great East Japan Earthquake disaster on mobile communications infrastructure (compared with that of Great Hanshin-Awaji Earthquake)

Sources: *Disaster Management (Cabinet Office, Government of Japan)*, *White Paper (Ministry of Internal Affairs and Communications)*, *News Release (Ministry of Economy, Trade and Industry)*, *Recovering from the Great East Japan Earthquake NTT East's Endeavors (NTT East Home Page)*



## APPENDIX 2

### 1. Outline of BHN Assistance following GreatEast Japan Earthquake

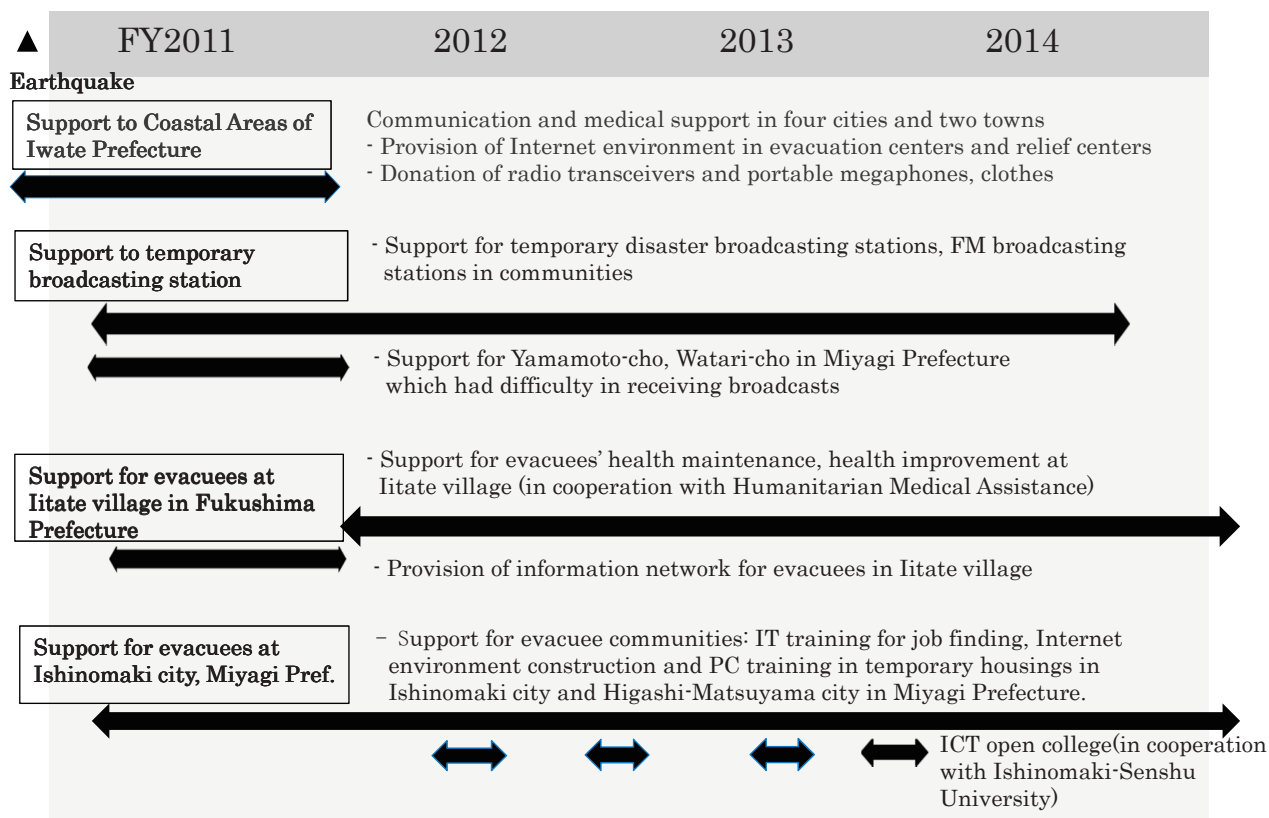
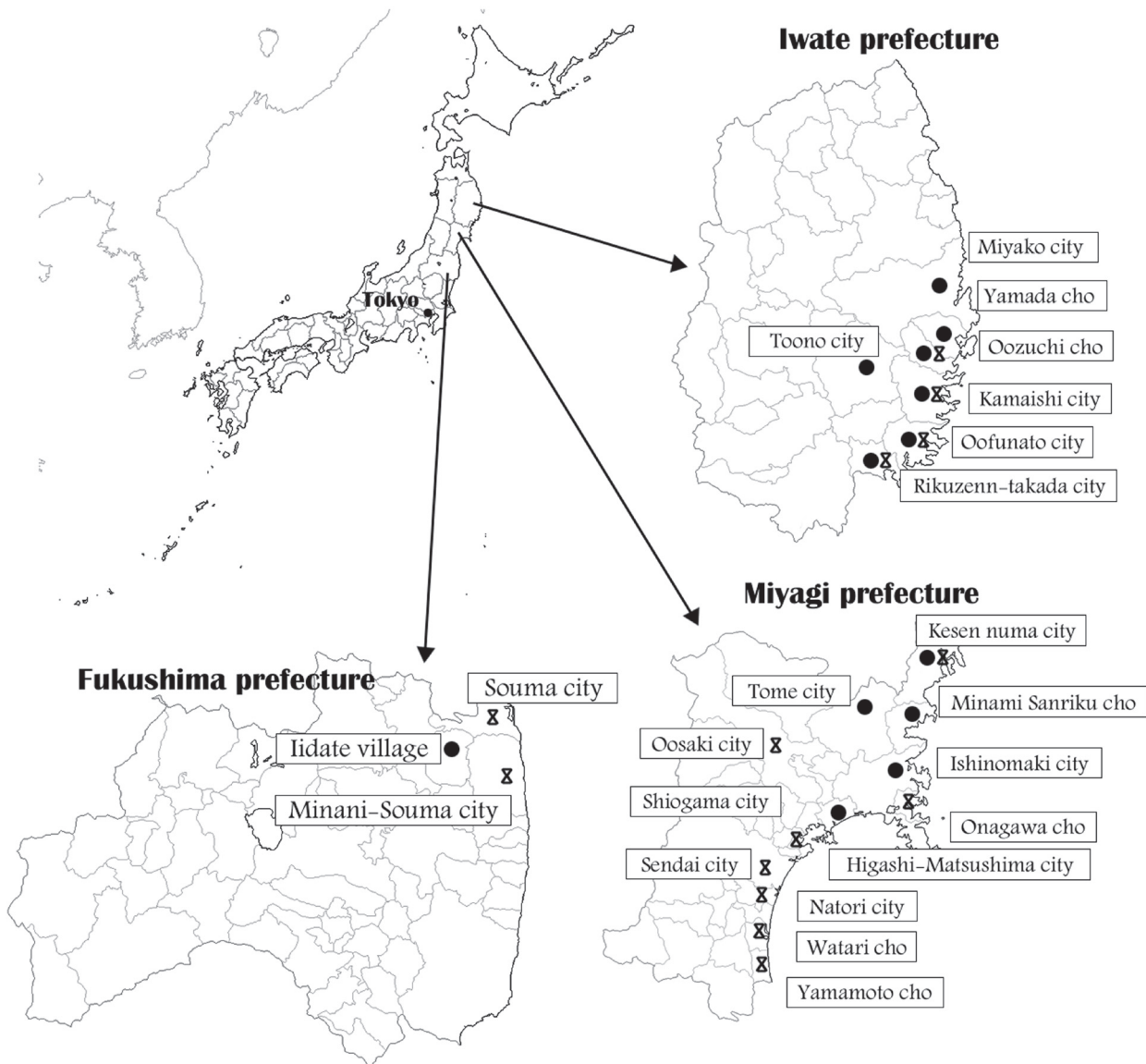


Figure 1: Outline of BHN Association's Assistance in Great East Japan Earthquake

## 2. Places of BHN support activities



Note: ●: Places where evacuee support activities (excluding broadcasting) provided

⊗: Places where broadcasting support such as new installations, antenna re-location and improvement of broadcasting reception, etc. provided

1) Places where support of temporary disaster broadcasting stations provided:

Iwate prefecture:	Kamaishi city, Oofunato city, Rikuzen-Takata city, Oozuchi cho
Miyagi prefecture:	Kesennuma city, Kamaishi city, Natori city, Oosaki city, Minami-Sanriku cho, Onagawa cho, Watari cho and Yamamoto cho
Fukushima prefecture:	Soma city, Minami-Soma city

2) Place of activity for support of community broadcasting

Miyagi prefecture:	Sendai city (Izumi ward)
Iwate prefecture:	Kamaishi city, Oofunato city, Rikuzen-Takada city, Oozuchi cho

## APPENDIX 3

### Corporations, Organizations, etc. Supporting/Cooperating with BHN

#### 1. Corporations and organizations providing assistance and financial support:

Atlantis  
AMOREPACIFIC JAPAN CO.,LTD.  
BitMeister Inc.  
Central Community Chest of Japan  
Japan International Volunteer Center  
Japan Platform  
Kanto den-yukai Kanagawa Branch  
Office MICA  
Metaco Inc  
Microsoft Japan Co., Ltd.  
MINANO KAI  
Mitsubishi Corporation Disaster Relief Foundation  
NTT BUSINESS ASSOCIE Corporation  
NTT DOCOMO, Inc.  
SEGA SAMMY HOLDINGS INC.  
Sorooptimist International of Niihama Minami  
Tokiko Kato Charity  
Individual donations (10 persons)  
<From overseas>  
GlobalGiving Foundation  
Symantec Corporation  
Taiwan Root Medical Peace Corps  
Individual donations (10 persons)

#### 2. Corporations and organizations donating ICT equipment, software, etc.:

DOCOMO Engineering Inc.  
DOCOMO Engineering Kansai Inc.  
Kanto den-yukai  
Microsoft Japan Co. Ltd.  
NTT DOCOMO, Inc.  
NTT-ME Corporation  
NTT Plala Inc.  
NTT Workers Union of Japan  
NTT Workers Union, NTT Communications HQ.  
Ootsubo kai  
Sanwa Engineering. Co. Ltd  
Symantec Japan, Inc.  
TEAC CORPORATION  
UCC Ueshima Coffee Co., Ltd.

#### <From overseas>

Microsoft Corporation  
Oxfam International  
Symantec Corporation

#### 3. Corporations and organizations providing support to BHN services:

City of Tono in Iwate Prefecture  
NTT EAST Corporation - Fukushima Branch  
NTT EAST Corporation - Miyagi Branch's  
Ishinomaki office  
NTT DATA Corporation  
NTT DOCOMO, Inc - Fukushima Branch  
Sanwa Engineering Co., Ltd.  
Tohoku den-yukai Fukushima Branch

#### 4. Corporations and Organizations offering office space and/or conference rooms:

City of Tono - Kenko Fukushi no Sato  
Ishinomaki-Shinkin bank  
NTT EAST Corporation-Fukushima Branch  
NTT DATA Corporation - Ishinomaki Renaissance  
Office

#### 5. Municipalities requesting BHN's support on contract basis:

City of Natori in Miyagi prefecture  
Iitate village in Fukushima prefecture

#### 6. Corporations and organizations collaborating in BHN supporting activities:

Advanced Medicine Forum  
Fukko University Alliance Ishinomaki Center  
Humanitarian Medical Assistance  
Iitate village Council of Social Welfare  
Ishinomaki Senshu University  
Japan Telework Association  
Nippon Foundation  
Rocinantes  
Radio FM YY  
Resurrection of Fukushima  
The National Institute of Information and  
Communications Technology (NICT)  
Tokiko Planning co.  
Tono Magokoro Net



## APPENDIX 4

### Brief Profile of BHN Association and its Activities

#### 1. About the BHN Association

##### 1) What is “BHN”?

BHN stands for Basic Human Needs, which is generally known as the absolute minimum resources essential to human long-term physical and mental well-being. We believe that today information such as data, news, knowledge and its communication are also a Basic Human Needs (BHN). As a non-governmental organization, the BHN Association specializes in Information and Communication Technology (ICT). To bridge and mitigate such huge gaps in ICT utilization in different parts of the world, the BHN Association operates by mobilizing its technical and human resources in cooperation with local people, communities, non-governmental and governmental organizations especially in the developing countries where it gives its support.

##### 2) Vision and Mission

Our vision is of a world where everyone can easily access information anytime, anywhere and enjoy the lasting benefits of such access. Our mission is to support people and communities by helping them to gain access to necessary information through our specialty of ICT with our focus being on developing countries.

#### 2. BHN Overview

##### 1) History

The BHN Association was established in 1992 as a non-governmental organization specializing in ICT by six leading individuals of Japan’s telecommunications industry to support people in developing countries through ICT.

Sept. 1992 - Establishment of the BHN Association

Sept. 1999 - Recognition as Specified Non-profit Corporation by Cabinet Office of Japanes government

Oct. 2006 - Winning of Ministry of Internal Affairs and Communication (MIC) Prize for International Cooperation and Contributions

Feb. 2010 - Approval as Specified Non-profit Corporation by National Tax Agency of Japan

##### 2) Membership

473 individual and 64 corporate members (as of November 2014)

#### 3) Management

Chairman: Masanori Satou

President: Satoshi Fujita

Vice Presidents: Hachihei Kurematsu, Hideo Maekawa, Kenichi Terauchi, Hirofumi Aizawa

Honorable Executive Advisors: Takeo Nobusawa, Moriji Kuwabara, Kiyoto Uehara

Secretary General: Makoto Yamashita

Secretarial staff: 8

#### 3. Three Main Activities

##### 1) Development/Grassroots Support

(International Technical Assistance):

In addition to the basic human needs such as clothing, foods and housing that may first come to mind, information, medical care and education are also necessary for the creation of safer and more comfortable living environment. However, there are a large numbers of underprivileged people whose basic human needs, as defined by our expanded definition, are not sufficiently met. BHN wishes to support such people, their communities and related public organizations to try to improve their standard of living and give them more opportunities to develop their capabilities by means of ICT.

*Our activities in this field are shown in Table 1.*

##### 2) Emergency relief

Natural disasters such as earthquakes, floods, cyclones and tsunamis as well as man-made disasters such as war threaten the lives of ordinary people and cause injury and death. In such emergency situations, the availability of information is critical not only for local people but also for rescue and relief teams. BHN provides ICT support to those in devastated areas to help facilitate their early recovery so that they can get life critical information and also communicate with their families and friends.

*Our activities in this field are shown in Table 2.*

##### 3) Human Resource Development

The Human Resource Development Program is an executive seminar provided by the BHN Association to nurture the development of future ICT leaders in developing countries. The participants not only learn ICT which is the most advanced in the world, but also brush up their skills in management and leadership. On top of that they get an opportunity to build up friendship and trust with the other participants.

*Activities in this field are shown on page 44.*

Activity	Country/Region	Year
Support for survivors of Chernobyl Nuclear Power Plant accident (microwave circuit construction for tele-medicine via satellite)	Russia, Republic of Belarus, Kazakhstan	1992 - 1994
Support for wireless network construction for medical care centers in rural area	Laos, Afghanistan	1998 - 2007, 2003, 2007 - 2010
Donation of PBX equipment in hospitals	Myanmar, Ukraine, Afghanistan	1997 - 2003
Support for tele-medicine systems	Malaysia Thailand	1999 - 2008, 2010 - 2013
Training of IT skill, wireless technology	Afghanistan	2004 - 2006
Support for telecommunication systems (in disaster and/or ordinary times)	Haiti, Myanmar	2010 - 2013, 2013 - 2015
Support for the return of evacuees	Myanmar	2013 - 2014
Support for Community radio system in Bangladesh (Hatiya island)	Bangladesh	2013 - 2017

**Table 1: BHN Development/Grass roots support**

Incident	Country/Region	Activity	Year
Earthquake	Turkey, Taiwan	- Donation of radio equipment	1999
	India	- Medical team telecommunication support	2000
	Iran	- FM radio equipment support	2004
	Pakistan	- Support for FM broadcasting station	2005
	Indonesia	- Distribution of radio	2006, 2009
	Haiti	- Repair of community FM station	2010
Cyclone, hurricane	Honduras	- Donation of telecom equipment	1998
	Myanmar	- Support for telecommunication system	2008, 2010
	The Philippines	- Support for Community Addressing system	2013 - 2014
Tsunami	Indonesia, Sri Lanka, Tohoku area in Japan	- Donation of FM radio station equipment, Support for temporary FM broadcasting stations, Internet use and PC use, etc.	2005 2011 - 2014
War	Afghanistan	- Safety confirmation service	2002
	Iraq	- Medical team telecommunication support	2003

**Table 2: BHN overseas emergency relief activities**

## **BHN Human Resource Development Activities**

### **1. Programs Funded by BHN using Donations**

Trainees: Young executives in Asian countries (total 130: see table below)

Program:

- First part Basic course

Five weeks at Malaysia Multimedia University (MMU)

- Second part: New technology, management, factory visit, home stay

Three weeks at The Overseas Human Resource and Development Association (HIDA) in Japan

<b>Country</b>	<b>No. of graduates</b>
Afghanistan	8
Bangladesh	11
Cambodia	12
Indonesia	11
Kazakhstan	2
Laos	18
Malaysia	1
Mongolia	2
Myanmar	10
Philippines	7
Sri Lanka	21
Uzbekistan	16
Vietnam	11
<b>Total (13 countries)</b>	<b>130</b>

**Table 3: Total graduates since 1998 by country**

### **2. Programs funded by Asia Pacific Telecommunity (APT)**

- November 2011: “ICT application” (e-Government, cyber security, medical care, disaster )
- January 2013: “Internet Application Services”
- February and March 2014: “Bridging Digital Divide by using Internet Applications”

### **3. Symposiums funded by Association of South East Asian Nations (ASEAN)**

- October 2013: Symposium on ICT for medical care for ASEAN countries
- May 2014: Symposium on ICT by Sensor Network
- December 2014: Workshop on ICT for Disaster Management



## Postscript

Nearly four years have now passed since the Great East Japan Earthquake struck northern Japan causing widespread destruction, great loss of life, and severe hardship for the survivors. Like many other NGOs active in the disaster stricken areas, at the end of 2014 we concluded our main support activities providing help to the survivors of the disaster, including our support for the temporary disaster FM broadcasting stations in Tohoku area and our support for the survivors living in temporary housing in Ishinomaki, Higashimatsushima and Minami-Sanriku. However, we are continuing to help the people of Iitate who have fled from the Fukushima nuclear plant disaster.

In view of the fact that we are still continuing our support activities in certain areas, it was originally proposed that we prepare reports on each activity after that activity is completed.

However, upon learning that the Third UN World Conference on Disaster Risk Reduction was going to be held in March 2015 in Sendai, one of the disaster-stricken cities, we finally decided it would be timely to prepare a consolidated report on all our activities to date prior to this important conference,

The report consists of five parts each describing a group of different types of activities, together with essays written

by people who played critical roles in the launching of the BHN Association's support activities immediately after the disaster.

It should also be noted that the report has been prepared both in Japanese and English, although the English version is shortened version of the full Japanese report.

I would like to thank Mr. Masanori Satou, Chairman of BHN Association, Mr. Mitsuake Hatakeyama, and Ms. Tomoyo Hayashi for their efforts in planning the overall structure of the report, collecting contributions, gathering data and editing the report.

I really hope there will never again be a disaster as devastating as the Great East Japan Earthquake Disaster but the BHN Association has prepared this report in the belief that it will serve as a useful guidebook to assist in the planning and conducting of disaster relief support activities in case such a disaster occurs in future.



**Makoto Yamashita**  
Secretary General  
BHN Association



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