

# CSR Digest 2011

Corporate Social Responsibility Digest Year ended March 31, 2011



an Information Society Friendly to Humans and the Earth

**NEC Corporation** 

Overcoming the March 11<sup>th</sup>, 2011 Disaster to Help Realize an "Information Society Friendly to Humans and the Earth"

### How has the NEC Group responded to the disaster on March 11<sup>th</sup>, 2011?

We extend our deepest sympathies to all those affected by this disaster. We aim to use all resources of the NEC Group to do everything we can to assist with the earliest possible recovery of the affected areas.

The scale of the disaster was unprecedented, and the NEC Group was impacted heavily. However, we were able to restore normal operations at five factories in the Tohoku region by March 23<sup>rd</sup>.

We have supplied cloud-based web hosting and corporate accounting services free of charge to businesses in the affected areas. Employees of NEC Group companies worldwide have made financial donations, and we have also donated PCs and IT networking equipment to residents in the devastated areas. The total value of the Group's assistance is over ¥100 million.

In addition, employees have volunteered to help disaster restoration and recovery efforts in various ways.

I believe that these activities have given us a new perspective on the NEC Group's role in society.

### Q Your point relates directly to corporate social responsibility (CSR). What is the NEC Group's fundamental view on CSR?

I believe that the earthquake disaster has put the true worth of CSR to the test. At NEC, we consider CSR initiatives to be inseparable from corporate activities. We aim to ensure the sustainable development of society and the NEC Group by implementing The NEC Way, the collective activities of NEC Group management.

Let me explain what I mean more specifically. We are exerting our efforts to realize "an information society friendly to humans and the earth," as set forth in the NEC Group Vision 2017. To this end, we are striving to help solve issues faced by customers and society through our businesses, based on rigorous enforcement of compliance. In this way, we hope to gain the trust and support of all stakeholders, which in turn will support business profitability and growth.

The earthquake has made us take a deep look at the nature of our vision for "an information society friendly to humans and the earth," and how the NEC Group can contribute to realizing such a society.

### Could you please go into more detail on some of the activities that the NEC Group is doing to realize "an information society friendly to humans and the earth"?

The world is currently experiencing profound changes.

We are seeing issues emerge on a global scale. Examples include the world's rapid population growth; the aging of societies, predominantly in developed countries, and various disparities that arise in this context; global warming and climate change issues; and increasingly serious environmental problems.

From the perspective of corporations, these issues can be seen as emerging needs. Looking ahead, I believe that companies must incorporate the fulfillment of these emerging needs into their management strategies and convert such needs into business opportunities. This is because doing so will enable them to make a larger contribution to society as companies. Our vision towards "an information society friendly to humans and the earth" embodies our aspirations in this regard. We would like to help build a society that is good for people, and also good for the planet. That is why the NEC Group will demonstrate its strengths to provide products and services that will satisfy our customers and help them to grow while also making a meaningful contribution to the advancement of society at large.

Toward "friendly to humans," in fiscal 2011, NEC delivered the flight information system for the new international passenger terminal at Tokyo International Airport (Haneda), a project that focused on universal design. We also supplied a cloud-based education system to the San Juan Ministry of Education in Argentina. Through these projects, NEC has contributed to providing better access to information and bringing the benefits of the digital society to many people across developing countries and emerging markets.

In terms of "friendly to the earth" initiatives, NEC is helping to realize a low-carbon society through various measures. For example, we are using cloud computing technology to reduce CO<sub>2</sub> emissions by customers and society as a whole. We are also supplying smart-grid technology utilizing rechargeable lithium-ion batteries. In fiscal 2011, NEC helped to reduce CO<sub>2</sub> emissions by 2.12 million tons. In terms of CO<sub>2</sub> emissions reductions at the product usage stage, the overall energy efficiency of our products has improved by 53% since fiscal 2006.

I believe that we must accelerate such initiatives going forward. NEC needs to proactively offer proposals that create value for its customers and society at large by being sensitive to changes in their values and needs. In doing so, we must embrace a broad perspective that encompasses customers beyond our business customers and society as a whole.

The recent disaster has highlighted various social needs for safety and security (in terms of dynamic local communities and robust communications infrastructure), easy access to information (particularly for seniors, people with disabilities and other vulnerable members of society), and saving power and energy. As part of initiatives to realize "an information society friendly to humans and the earth," the NEC Group has long promoted measures to create a safe, secure and energyefficient society before the disaster struck.

The disaster has reaffirmed for us the necessity of continuing and upgrading such initiatives. The importance of information and communications technology (ICT) as basic social infrastructure is growing. We are doing all we can to create ICT infrastructure that is highly reliable and that minimizes any impact on customer businesses and social systems even in emergencies.

### What roles do the globalization of management and the promotion of workplace diversity play in working to realize the NEC Group Vision 2017?

One of our key performance targets for fiscal 2018 is to raise the ratio of overseas sales to 50%. We have divided the world into five regions and created regional headquarters to promote the local management-driven development of NEC Group operations in each region. Besides speeding up delegation of authority to the regions, we are also trying to promote the globalization of management based on fast and flexible decisionmaking through Human Resources policies including the localization of management structures. We recognize that promotion of diversity in the workforce is a vital element, too. Within the next three years, we aim for non-Japanese to make up 30% of employees at our overseas sales divisions. We are also actively pursuing other pro-diversity policies.

# **Q** In closing, what international CSR initiatives will the NEC Group pursue going forward?

NEC has been a signatory to the United Nations Global Compact (UNGC) since 2005. We have been working not only to uphold the universal principles of the UNGC within the Group, but also to step up the extension of the principles to the suppliers that make up our supply chains. These principles concern issues such as human rights, labor standards, environmental protection and anti-corruption measures.

We were one of the first Japanese companies to institute a Stakeholder Review based on the ISO 26000 international standard for social responsibility that was issued in November 2010. The results of this review can be found in the "Stakeholder Review" section on page 22.

Just as the ISO 26000 standard espouses the value of stakeholder engagement, I believe that societal concerns are having a growing impact on business.

The NEC Group recognizes the importance of ongoing engagement with stakeholders to our business. We plan to continue promoting CSR-driven management across the NEC Group, based on the ISO 26000 standard.

The NEC Group would like to extend our sincere appreciation for the continued support of our stakeholders.

July 2011 NOBUHIRO ENDO President, NEC Corporation

# Mid-Term Growth Plan "V2012-Beyond Boundaries, Toward Our Vision"

CSR management at NEC is aimed at realizing the "NEC Group Vision 2017" in order to contribute to a sustainable society. In February 2010, NEC unveiled the Mid-Term Growth Plan "V2012—Beyond Boundaries, Toward Our Vision." NEC sees "V2012" as a milestone for achieving the "NEC Group Vision 2017." Under "V2012," NEC is concentrating on three key initiatives: focus on the "C&C Cloud Strategy," expand global business, and create new businesses. Under the plan, NEC's targets for fiscal 2013, the year ending March 31, 2013, are net sales of ¥4,000 billion, with an overseas sales ratio of 25%; net income of ¥100 billion; and ROE of 10%. In the following section, we report on the main achievements in fiscal 2011 and our future plans for each of the three key initiatives.

#### 1. Focus on the "C&C Cloud Strategy"

NEC provided secure and reliable cloud computing services in a variety of fields, including core operations for local governments and systems for sharing information among hospitals. Efforts were also directed at fortifying our business infrastructure for providing cloud computing and many other services. NEC upgraded and expanded data centers while developing and optimizing common IT platforms for providing services.

Going forward, NEC will continue to promote the "C&C Cloud Strategy." Measures will include providing cloud computing services in a mobile environment utilizing the NEC Group's wireless technology. NEC will also upgrade and expand service lineups in line with the characteristics of each client business sector, press ahead with cloud computing services for customers' core operations and strengthen ties with overseas firms to drive global business expansion.

#### 2. Expand Global Business

In April 2011, NEC set up a regional headquarters (regional management company) in Latin America, in addition to its regional headquarters in each of the regions of North America, Greater China, Asia Pacific, and Europe, Middle East and Africa (EMEA). With this move, NEC has established a global network based on five key regions. To accelerate global business expansion, competence centers were also established to centralize technologies and expertise in each business. Businesses include the "Carrier Cloud" business, which supports the provision of cloud-based services to subscribers by telecom carriers, and the public safety business, including room access and immigration control solutions using biometrics technologies.

From now on, NEC will promote local business leadership from its five regional headquarters around the world. At the same time, we will accelerate the transfer of authority to local overseas subsidiaries while implementing personnel policies that result in greater appointment of local staff to management positions. The goal is to drive business expansion through speedy decision-making. Our efforts will be focused on areas expected to grow rapidly, including education, the Smart Energy and Green business, medical care, and public safety, especially in Asia and other emerging markets where we will also work to solve issues faced by society.

#### 3. Create New Businesses

In the Smart Energy and Green business, NEC pursued the automotive lithium-ion rechargeable battery business in collaboration with Nissan Motor Co., Ltd., while conducting field trials of rapid charger systems that will support the popularization of electric vehicles. Furthermore, NEC began taking steps to enter the future smart grid market. One initiative was the development of a large-scale power storage system for the power distribution grid. Together with partner companies, NEC also actively conducted trials of "energy management systems" that optimize energy usage at commercial facilities and homes. Looking ahead, NEC plans to expand the application of automotive lithium-ion rechargeable batteries beyond automobiles. To this end, we will strive to ensure that the results of field trials are steadily applied to the development of new businesses.

Meanwhile, in the field of multifunctional devices, NEC launched an Android<sup>™</sup> smartphone in the domestic market, while upgrading and extending its lineup of tablets. Looking ahead, NEC plans to continue rolling out products that make the most of its strengths to satisfy customer needs.

In fiscal 2011, the first year of the "V2012" plan, NEC made every effort to implement the foregoing measures. However, NEC met with some challenges in terms of the speed of execution. As a result, we were unable to achieve the plan's initial targets.

Going forward, NEC will pursue faster management, as we aim to enhance our corporate value over the medium and long terms, with the view of realizing the "NEC Group Vision 2017."

\* For further details on progress against the "V2012" plan, please refer to the NEC Annual Report 2011 and other publications.

# Corporate Facts/Segment Information/Editorial Policy



# Segment Information



#### IT Services Business

Systems implementation, maintenance and support, and outsourcing for government agencies and private-sector companies.

#### Platform Business

Products essential to the implementation of IT systems and enterprise network systems, such as servers, storage, software and IP telephony systems.



#### Carrier Network Business

Equipment required for network implementation to telecom carriers, along with network control platform systems and operating services.



#### Social Infrastructure Business

Broadcasting and video distribution systems, control systems, transportation and public network systems, fire and disaster prevention systems, and aerospace systems.



#### Personal Solutions Business

Smartphones, mobile phones, personal computers, Internet services, display solutions and other products for individuals and enterprises.

#### Other Business

Lithium-ion rechargeable batteries, electronic components and lighting equipment.

# **Editorial Policy**

The NEC Annual CSR Report 2011 (http://www.nec.co.jp/csr/ en/) covers in detail NEC's CSR activities and achievements mainly for fiscal 2011 (the fiscal year from April 1, 2010 to March 31, 2011). Meanwhile, the CSR Digest 2011 (this booklet)

summarizes this content based on seven CSR themes that are significant and relevant to our stakeholders and NEC.

NEC views these reports as important communication tools essential to earning the trust of all stakeholders.



#### **Scope of Report**

The content solely relates to NEC Corporation in certain sections, but also includes subsidiary companies in other sections. For information covering a specific set of NEC and subsidiary companies, the scope of such information has been explicitly defined in each relevant section. Unless noted otherwise, NEC refers to NEC Corporation and its subsidiary companies in this report.

#### **Reference Guidelines**

GRI's Sustainability Reporting Guidelines 3.1

Conformance table http://www.nec.co.jp/csr/en/report2011/gri.html NEC self-declares this report to GRI Application Level B.

#### **Other CSR-Related Information**

- Annual Environmental Report 2011
   http://www.nec.co.jp/eco/en/annual2011/
- Activities for Contributing to Society http://www.nec.co.jp/community/en/

At NEC, we consider CSR\* initiatives to be inseparable from corporate activities. We aim to ensure the sustainable development of society and the NEC Group by implementing The NEC Way.

It is crucial that companies recognize that their existence is premised on society, and at the same time is part and parcel of the global environment that is precious to all forms of life on the earth. NEC seeks to realize "an information society friendly to humans and the earth," as set forth in the NEC Group Vision 2017 based on its Corporate Philosophy. To this end, in the course of daily operations, every employee will rigorously adhere to corporate ethics and compliance standards, practice the NEC Group Core Values (what we value and base our behavior on), and help solve issues faced by customers and society.

Our important responsibilities also include ensuring full accountability through the active disclosure of information on the results of our CSR initiatives and related issues, and communicating with stakeholders to improve our corporate activities and build trust.

NEC considers CSR-driven management to be management based on the foregoing approaches.

\* CSR = Corporate Social Responsibility

# Sustainable Development of Society and the NEC Group through The NEC Way



# NEC's Seven CSR Initiatives

For the purpose of conducting CSR activities, NEC has selected seven priority initiatives that are important to its business strategies from the standpoints of "Stakeholder Interests and Social Concerns" and "NEC's Perspective."



\* Of the seven key CSR initiatives, NEC sees "build reliable information and communications infrastructure" as the foundation for solving various issues through its business activities. Accordingly, in this booklet, we focus on reporting on the six other key CSR initiatives.

# Establish a Safe and Secure Society: Supporting the Recovery from the Disaster

NEC wishes to extend its deepest sympathies to all those affected by the Great East Japan Earthquake on March 11. We sincerely hope for the earliest possible recovery of the affected regions. NEC aims to make a significant contribution by helping Japan to rise above the disaster and to forge a new path of recovery. This section describes what NEC is doing to support those in the disaster-affected areas and other stakeholders, along with various related internal

NEC Group initiatives.

\*This report looks at activities in the period from immediately after the disaster to around July 2011. Many of these and other initiatives are ongoing.

### Helping with the Restoration and Maintenance of Social Infrastructure in Partnership with Customers

As a major supplier of the IT and network solutions that underpin social infrastructure, the NEC Group aims to minimize disruption to these lifelines. The Group began providing assistance immediately after the disaster to local governments, telecommunications carriers, hospitals, corporate clients and other customers with the restoration of infrastructure systems.

For example, NEC is supporting infrastructure restoration

#### Helping Communications Restoration Using Satellites

Most of the terrestrial public telephone network in the disasterstricken region was rendered inoperable because communications lines were brought down immediately after the disaster and thereafter. At the request of the Japan Aerospace Exploration Agency (JAXA), NEC helped to rapidly install a ground station in Iwate Prefecture for the high-speed Internet telecommunications satellite KIZUNA (WINDS)\*, along with supporting communications links, so that the prefecture's various disaster response headquarters could share information and start compiling data on the safety status of local residents. This helped with the restoration of communications within the affected region.

\* Launched by JAXA in 2008, the KIZUNA (WINDS) satellite can support highresolution images and video in times of emergency or to areas with poor terrestrial network coverage using large-capacity network communications links. These network capabilities support high-quality images and video. NEC manufactured the main satellite bus for KIZUNA and the ground station. efforts to reestablish communications, including phone exchange equipment, optical fiber networks, mobile phone base stations and submarine cable systems. NEC is also assisting with the restoration of IT systems for central and local government and corporate clients in order to maintain critical social functions such as fire and disaster prevention, broadcasting and transportation.



**KIZUNA (WINDS) satellite** 

#### Supporting Customer's Business Continuity

NEC has installed virtual desktop thin client systems\* to support the backbone operations for the whole of Tokio Marine & Nichido Fire Insurance Co., Ltd. These ensured no data was lost, even at branch offices in Miyagi Prefecture that were damaged in the disaster, such as those in the cities of Ishinomaki and Kesennuma.

NEC made special deliveries of thin client terminals to a temporary office set up by the customer in the city of Morioka, lwate Prefecture to resume operations. NEC also implemented the systems needed to restore data center access. This helped the customer to get the office up and running quickly.

NEC was highly commended by the customer for these

actions. The customer noted, "We were able to restore our branch office operations in the affected areas and respond to customers affected by the disaster by assessing earthquake insurance claims. We were extremely pleased that we could fulfill our role as a non-life insurer."

\* Thin client systems are terminals with no built-in storage media that access programs and data over a network connection.



Thin client terminal

## Assisting with the Restoration and Recovery of Local Communities

The NEC Group has contributed to the restoration and recovery of the affected regions by donating relief money exceeding ¥100 million, along with products and services. The Group is also engaged in disaster-related social contribution activities, including volunteer programs by employees and the modification of existing programs to focus resources on helping children, people with disabilities and seniors in affected areas. Examples include holding a charity concert to raise funds for children orphaned by the disaster; relaying domestic and international events to affected areas via Internet connections as part of a program to help patients with intractable illnesses; and supplying emergency ICT services to support information sharing. Some other examples are described below.

#### Employees Work as Volunteers in the Disaster Zone

Responding to calls from employees to help directly in the disaster-relief under the slogan of "One NEC," NEC organized a volunteer program to allow employees to help in the affected areas by clearing sludge and debris, stacking rubbish or other clean-up activities. A total of 31 employees took part in the first day of such activities on July 22 in the coastal areas of Rikuzentakata city (Iwate Prefecture). Many local residents expressed thanks for this contribution. One resident said, "I'm pleased to see that our coastline has been restored. Thank you." The program is being extended across other parts of the region.

#### Supporting Communications at Evacuation Centers

In partnership with UQ Communications Inc., the NEC Group has developed a system to provide seniors, children and others living in the evacuation centers in the cities of Ishinomaki and Tagajo (Miyagi Prefecture) with access to local government announcements and varied information such as updates on the nuclear power plant and weather forecasts. The system, which is free for evacuees, allows people to lodge requests or consult with local government organizations. The service began in late May 2011.

Specifically, the system comprises high-speed wireless LAN routers and Cloud Communicator mobile terminals installed with application software for delivering information and services tailored to the needs of disaster victims and local governments

and is providing technical support. NEC aims to continue this program and to broaden its scope.

via a cloud-computing platform. NEC installed the equipment

Prefecture on July 22



**Cloud Communicator terminal installed in an evacuation center** 

# Supporting Community Development for Those in Temporary Housing

NEC is promoting the development of communications networks for those people in temporary housing based on the deployment of super-compact transmitters that operate on spare terrestrial digital television bandwidth. This facilitates timely sharing of information from local government organizations or other public agencies, and also enables community development among residents. Field tests involving an NPO and local residents were conducted successfully in the town of Watari (Miyagi Prefecture) from June to July 2011, paving the way for the system's full deployment.



Field test for temporary housing residents



### Preserving the Safety of Employees and Their Families

NEC introduced the One NEC Business Continuity Support System in 2007 as a way of confirming employee safety. The system integrates the administration of safety confirmation data obtained from emails sent from mobile phones and PCs, and information from ID card readers that have been installed on each floor of the company.

NEC used this system immediately after the earthquake struck to confirm quickly the safety of all employees, not only in

those areas most affected, but also across all of its plants and offices in the Tokyo metropolitan area.

NEC began sending emergency supplies of food, drinking water and daily necessities on March 12. These supplies helped the employees and their 13,000 family members, allowing them to focus on restoring business operations quickly with peace of mind.

### Business Continuity and Power-Saving Measures across the NEC Group

# Establishment of Emergency Task Force and Information Gathering/Sharing within the NEC Group

A total of 77 facilities operated by 30 NEC Group firms were damaged in the disaster. The five NEC Group plants in the Tohoku region were subject to intense shaking (of around 6- to 6+ on the Japanese scale of seismic intensity). While there were no personal injuries or fatalities, the disaster halted production at these sites because of damage to production lines and the cutting-off of power, water, gas and other infrastructure within the plants. Employees found it difficult to commute. Damage to roads, traffic restrictions, shortages of fuel and other factors affected the distribution networks, stopping product shipments from plants and warehouses as well as the procurement of materials and other operations.

NEC established the NEC Group Emergency Operational Task Force nine minutes after being struck by this unprecedented disaster. Headed by the president of NEC, the task force initiated business restoration support measures in line with existing contingency plans. Separate task forces were established for each business unit (BU) and operating site to ensure that the NEC Group could rapidly implement operational restoration efforts in a seamlessly coordinated manner.

NEC collected data on the status of all NEC Group

companies and related infrastructure in the disaster-affected and adjacent areas of the country by utilizing the One NEC Business Continuity Support System. This enabled vital information to be relayed in real time to the people concerned.

# Restoration of Production and Distribution within the Affected Region

Damage to NEC Group's production lines and plants in the Tohoku region was minor on account of seismic proofing work undertaken during earlier production innovation activities, based on previous earthquake experience. Production restarted at all plants by March 23 as the result of the hard work of all employees.

On the logistics side, the related NEC Group company set up a hub to handle distribution within the Tohoku region and then began the construction of an emergency logistics network. Distribution sites in Kanto temporarily assumed the functions of the damaged distribution facilities in the region, which enabled the logistics network to be restored at the same time as the production facilities.

In this way, NEC was able to continue its business operations via the timely execution of its business continuity plan (BCP), which had been regularly put through repeated simulations in



NEC Network Products Ltd.— Ichinoseki Plant on March 14 (damaged) and March 23 (production restarted)

preparation for a disaster. However, a large number of problems still emerged owing to the large scale of the disaster compared with the BCP risk assumptions. An unexpected issue was the extensive area affected, which led to damage across plants, distribution centers, suppliers, sales and maintenance bases, causing restoration-related problems. The large aftershocks also continued to affect social infrastructure, leading to further delays in the normalization of product supplies to customers. NEC plans to update its BCP to incorporate the emergency measures that were put in place to solve such issues.

#### Measures Relating to Internal Information Systems

Earlier preventive measures meant damage to NEC's internal information systems was also relatively minor. These systems are installed in seismic-proofed data centers where all of the systems for monitoring the operations of servers and intranet equipment are located. Although some data centers were in areas that were affected by Tokyo Electric Power Company's rolling blackouts, NEC's use of emergency back-up generators ensured that all of its IT systems and service operations continued to function.

NEC has formulated new internal rules for earthquakes with a Japanese intensity scale of at least 5+. Periodic emergency training based on these rules has been instituted. The lessons learned from everyday disaster training drills helped NEC to assess and restore IT operational functions rapidly.

Public transport stoppages made it difficult for many NEC Group employees in Tokyo to commute to work following the disaster. NEC quickly supplied employees with a software-based thin client service solution (that enables an ordinary PC to boot up from a CD-ROM) to facilitate telecommuting.

#### **Energy-Saving Initiatives for Summer**

In line with government plans to restrict the power demand over the summer months, the NEC Group has instituted the following measures aimed at cutting its maximum power consumption within the service areas of Tokyo Electric and Tohoku Electric by 15% compared with fiscal 2011 levels. These actions include and supplement earlier energy-saving measures.

The first approach is to use alternative energy sources. After confirming CO<sub>2</sub> emissions, we utilize cleaner energy sources such as gas instead of electricity. Switching is expected to generate substantial energy savings, notably with air-conditioning systems.

A second approach for facilities within the Tokyo Electric service area is to institute a rotation of fixed holiday periods. This measure will exclude a number of plants to minimize the impact on production. Offices and other sites will be divided into four groups, with each group of sites closing for two one-week periods on rotation from July to September. Some public holidays will be substituted so that total working time is not reduced and the system causes minimal disruption to NEC's customers and the public. Thin client systems and other measures will also be adopted to enable employees to work at those sites not subject to rotating closure.

NEC is making energy consumption more visible by enabling power usage to be viewed on the intranet in near-real time. This will help to optimize energy-saving initiatives by raising employee awareness of energy use.

In addition, NEC is continuing to develop contingency plans for further energy cuts in emergency situations, including the use of back-up generators and emergency stoppages of equipment.

### Contributing to Disaster Recovery as "One NEC"

"Establishing a safe and secure society" is one of NEC's important CSR initiatives.

In line with NEC's mission of creating "an information society friendly to humans and the earth," as set forth in the "NEC Group Vision 2017," the NEC Group is engaged in Japan's recovery from the twin perspectives of business continuity and saving energy.

With respect to business continuity, the NEC Group is leveraging its strengths in IT and networks and related experience to help rebuild communications infrastructure and to devise contingency plans in preparation for future natural disasters. NEC is also working to create a safe and secure society based on the development and operation of cloud computing systems and ICT infrastructure to facilitate network-based usage of information systems.

With respect to saving energy, NEC aims to contribute through energy-efficient products such as energy storage

systems (based on automotive rechargeable lithium-ion battery technology), energy management systems for commercial facilities, buildings and homes, and energy-efficient servers.

NEC plans to refine technical and solutions expertise based on experience developed through activities aimed at recovery from the Great East Japan Earthquake, with the view of creating a more energy-efficient, safe and secure society. NEC will also strive to provide more precise disaster prevention and mitigation information using high-performance sensors and cloudcomputing technology. Through these measures, we hope to contribute to realizing an "information society friendly to humans and the earth" as "One NEC."

URL http://www.nec.co.jp/csr/en/report2011/ earthquake/

# Address Climate Change and Environmental Preservation

Based on the NEC Group Vision 2017, NEC aims to realize "an information society friendly to humans and the earth." To this end, we will accelerate measures to help develop a low-carbon society. Concrete measures include using the "C&C Cloud" to reduce CO<sub>2</sub> emissions from customers and society at large, and providing smart grids utilizing lithium-ion batteries.

### Promoting the NEC Group Environmental Management Action Plan 2017/2030

The NEC Group Environmental Management Action Plan 2017/2030 is a medium- and long-term action plan based on three key perspectives—low carbon, ecosystem and biodiversity preservation, and resource recycling and conservation.

#### Low Carbon

#### Helping to Reduce More Co<sub>2</sub> Emissions through the "C&C Cloud"

NEC has set a goal of helping to reduce the CO<sub>2</sub> emissions of society as a whole through IT solutions. NEC will enhance solutions that guide society as a whole towards becoming "entirely eco-friendly" with respect to work, mobility and lifestyle, primarily through the "C&C Cloud."

In fiscal 2011, NEC unveiled the "Entirely Eco-Friendly" Manufacturing and the "Entirely Eco-Friendly" Logistics solutions sets. In this manner, NEC has helped to reduce the environmental impact of client operations and society as a whole.

#### "Entirely Eco-Friendly" Manufacturing

NEC has organized the environmental challenges facing manufacturers working to reduce the environment impact of production and has developed a set of solutions called "Entirely Eco-friendly" Manufacturing for helping achieve these goals.

#### "Entirely Eco-Friendly" Logistics

"Entirely Eco-Friendly" Logistics is a set of solutions for reducing  $CO_2$  emitted by distribution and sales vehicles using ICT such as intelligent transport systems (ITS). The solution set covers three areas: improving fuel economy, reducing driving distance and alleviating congestion.

See-T Navi, a safety and eco-navigation system NEC began providing to Yamato Transport in fiscal 2011, helps make driving safer and more ecological by alerting drivers with real-time voice announcements and making use of daily driving reports on safety and energy efficiency. The system's voice alerts for quick starts and sudden acceleration and the information it provides on fuel economy help reduce CO<sub>2</sub> emissions from delivery vehicles by encouraging more ecological driving practices. See-T Navi was honored with a Logistics Environmental Technology Development Award at the 12th Logistics Environmental Awards.

Our other solution sets provided so far, namely "Entirely Eco-Friendly" Office and "Entirely Eco-Friendly" Data Center, have also begun to produce concrete cases of CO<sub>2</sub> being successfully reduced.

Comment from the NEC manager

"We will help to reduce CO<sub>2</sub> emissions from logistics operations by utilizing ICT."



Assistant Manager Transportation Industries 1st Sales Department NEC Corporation



See-T Navi in operation

#### "Entirely Eco-Friendly" Office

In fiscal 2011, NEC provided 1,144 energy-efficient thin client systems to Hiroshima University, the largest number of such terminals of any national university in Japan. Power consumption is expected to be reduced by at least 30,000 kilowatt-hours annually, which would cut CO<sub>2</sub> emissions by some 67%. Over the next five years CO<sub>2</sub> emissions are expected to be reduced by approximately 40 tons. In order to fulfill Hiroshima University's request of implementing educational IT systems with low environmental impact, we proposed that all the main system devices, from servers to terminals, be low power consumption products from NEC, and this has led to lower CO<sub>2</sub> emissions.



180 thin client terminals installed in an open space for IT education terminals

NEC is also making progress with energy-saving solutions for offices at its own sites. At the NEC Tamagawa Solutions Center, a new facility, a range of eco-friendly initiatives is being put into practice to implement the "Entirely Eco-Friendly" Office concept. An over-50% reduction in CO<sub>2</sub> emissions compared to conventional levels is expected thanks not only to energyefficient building facilities but also to making energy consumption transparent and modifying the working styles of employees. One-third of the total reductions will come from utilizing ICT.



Screen display makes energy use transparent (screen simulated)

#### "Entirely Eco-Friendly" Data Center

NEC is reinforcing and expanding major data centers in 10 locations around the country—core sites for providing cloud services. The Chubu Data Center in the Chubu region was designed for total energy efficiency. It uses environmentally conscious ICT products and features energy-efficient equipment, facilities and buildings, including air conditioning and power supply systems that support stable systems operations. The design targets a power usage effectiveness (PUE) of 1.5 or less, an indicator of a data center's energy efficiency. Data center operations utilize "Entirely Eco-Friendly" Data Center solutions, with environmental considerations reflecting PDCA cycles covering everything from energy use transparency to planning and implementing improvement measures.

By providing a variety of "entirely eco-friendly" solutions that contribute to CO<sub>2</sub> reductions, in fiscal 2011, NEC helped to reduce CO<sub>2</sub> emissions by a total of 2.12 million tons. In fiscal 2012 and beyond, we will work to expand this contribution in connection as we develop the "C&C Cloud" business. Moreover, in terms of reducing CO<sub>2</sub> emissions at the product usage stage, NEC has successfully improved the energy efficiency of its products by 53% compared to fiscal 2006 levels.

NEC intends to continue to carry out activities for reducing CO<sub>2</sub> emissions through products and solutions in order to help bring about a low-carbon society.



CO<sub>2</sub> emissions at the NEC product use stage





#### **Ecosystems and Biodiversity**

NEC has set a target of doubling the number of employees participating in social contribution activities aimed at conserving ecosystems and biodiversity by fiscal 2018, compared to fiscal 2010 levels.

To meet the target, we expanded the scope of the "NEC *Tanbo-dukuri* Project,"\* which was started in 2004, and



Volunteering in the "Yatsuda-saisei Ikiiki Project"

initiated the "Yatsuda-saisei Ikiiki Project"\* in fiscal 2011. We also established the NEC Group Biodiversity Contribution Activities Guidelines. Activities were promoted within the NEC Group as a part of the NEC Make-a-Difference Drive (see page 20), and as a result, in fiscal 2011 the number of participants at the global level exceeded our target of 6,000 people.

We have also begun efforts to help conserve biodiversity through the IT solutions we provide.

 $^{\ast}$  A series of employee awareness-raising activities through restoration of fallow rice fields.

#### **Resource Recycling and Conservation**

NEC continues to develop bioplastics with low environmental impact that are more amenable to widespread use. In fiscal 2011 we developed a bioplastic using non-food plant materials, specifically cellulose, the main component of plant stems, and cardanol, a primary component of cashew nut shells. It is the world's first bioplastic to simultaneously feature stable supply potential, a high plant component ratio of over 70% and a durability level suitable for electronic devices. Using this proprietary technology we will accelerate efforts to achieve our goal of using bioplastics in all major products.



### Accelerating Energy Business Initiatives

NEC is promoting initiatives aimed at bringing about a "new energy society" that allows people to live comfortably even as energy sources diversify. The initiatives address both increases in global energy demand and corresponding increases in CO<sub>2</sub> emissions.

NEC will provide an "energy management system" that uses ICT to connect energy components such as electric vehicles, rapid rechargers, solar power generation equipment, and storage batteries, and optimally controls energy usage at various different levels, including households, buildings, and stores. Furthermore, NEC will support the provision of convenient and user-friendly services to business operators via the "C&C Cloud."

As the scope of services provided between regions and countries expands, the amount of data exchanged will increase dramatically. Thanks to increasingly advanced technologies for handling large volumes of data accurately and at high speeds, NEC is providing systems that not only compile collected data but also identify and utilize that data in real time.

Through these technologies NEC will provide secure, reliable, and convenient services that can be used anytime, anywhere, and by anyone, in order to help bring about a "new energy society."

#### Popularizing Electric Vehicles with High Performance Lithium-Ion Batteries and Charging Infrastructure Systems

The Nissan Leaf electric car launched by Nissan Motor Co., Ltd. in December 2010 is equipped with high-performance automotive lithium-ion batteries. NEC supplies the battery's electrodes, a key component, and began mass producing them at the NEC Sagamihara plant in July 2010.

The existence of a charging infrastructure will be essential to further popularize electric vehicles, and its development is expected to constitute a new form of national infrastructure. For example, by linking rapid chargers with ICT, C&C Cloud is expected to enable services such as payment via electronic money and incentive point tie-ups, and navigation of drivers to charging stations. The Smart Network Project, which has been adopted by Japan's Ministry of Internal Affairs and Communications as a part of the Projects to Standardize and Promote Network Integration Control Systems, seeks to establish communication standards to facilitate the efficient operation of electric vehicles. NEC's participation in the project centered on testing services provided by networking charging stations with a cloud system.

URL http://www.nec.co.jp/eco/en/annual2011/hl/02.html

#### Comment from the NEC manager



### "We aim to develop a charging infrastructure that allows people to use eco-friendly electric vehicles with peace of mind."

Kenichi Ishii Principal Researcher System Platforms Research Laboratories NEC Corporation



Smart Network Project (Yokohama)

#### Smart Houses for "Intelligent Eco-Living"

NEC is involved in the development of home energy management systems (HEMS) and household energy storage systems.

In October 2010, NEC formed a business alliance with Sekisui Chemical, Co., Ltd., the industry leader in housing with solar power facilities, in the area of HEMS, the core technology in the smart house. NEC provides systems that enable occupants to efficiently conserve energy by making home energy use transparent through ICT and cloud services. The system has been included as a standard feature of Smart Heim houses sold by Sekisui Chemical since April 2011.

Additionally, in July 2011, we commercialized a household energy storage system using lithium-ion batteries and began marketing the system to home builders and other corporations. The system can be combined with solar power or utilized to make use of nighttime power during the day. It can also be used as a backup power source during power outages.

NEC will continue providing solutions tailored to the needs of home builders, energy providers and households to help further popularize smart houses and the kind of "intelligent eco-living" they make possible.



# Include Everyone in the Digital Society

NEC endeavors to help solve issues faced by society through its businesses so that everyone may be included in and benefit from the digital society. This section presents an example of a project where NEC helped Bolivia to achieve fair and democratic elections, increasing the voter registry by more than 40%, and also looks at a universal design initiative for airport users.

# NEC Biometrics Technology Enables Fair and Democratic Elections in Bolivia ~Biometric Voter ID Solution for the Plurinational State of Bolivia~

In January 2010, a new president took office in the South American nation of Bolivia. Bolivia used a biometric voter ID solution based on NEC's biometrics technologies in the run-up to the presidential elections. This biometric voter ID solution increased the number of registered voters in the country from 3.5 million to 5.2 million, enabling fair and democratic elections in Bolivia.

#### The Road to Fair Elections

Bolivia has a population of about 10 million people from many different cultures. For political and geographical reasons, Bolivia has long lacked a permanent and reliable voter list.

In response, NEC helped to enable fair elections in Bolivia by creating a highly reliable electoral voter list through a solution consisting of AFIS (Automated Fingerprint Identification System) and facial recognition technology. The solution was supplied by NEC to the National Electoral Court of Bolivia (Corte Nacional Electroral: CNE).

Bolivia is a landlocked country surrounded by other countries on all sides. The Andes Mountains runs along the western flank of the country, while the Amazon rainforest covers the country's northeast. With this geographical diversity, the country is home to a multitude of ethnicities. Against this backdrop, this project involved developing a biometric ID solution that could accurately identify every voter across multiple ethnicities, and the training of expert staff to eliminate suspect registrations, including preventing voter duplication. The project also extended to support for logistics, legal affairs, and communications for promoting understanding of the new system by the voters, among other aspects. NEC successfully completed the project in the short span of four months.

#### Comment from the customer

### "I am proud to have achieved democratic and fair elections."

Mr. Antonio Costas President (as of 2009) National Electoral Court of Bolivia (CNE) \* CNE was subsequently renamed the Tribunal Supremo Electoral (TSE).

"The new biometric voter list created through the cooperative efforts of NEC and the CNE has resolved definitively the problems of voter duplication and voter fraud, restored political stability in the country and given a record number of Bolivian citizens the chance to participate in democratic elections."



Workers carry voter enrollment equipment to people living in the Andes Mountains

#### Voter enrollment



#### Winning the Confidence of Bolivian Citizens through Technological Prowess and a Dedication to Completing the Mission

For this solution, NEC installed 3,000 full-enrollment terminals throughout the country for use in registering fingerprint, facial, and signature data. NEC also implemented a main and a backup data center, and installed other IT equipment.

NEC's fingerprint matching technology boasts the world's highest level of accuracy, with a matching precision of at least 99.9%. However, this solution utilized facial recognition technology alongside AFIS to address cases of insufficient voter ID data arising from the inability to read some fingerprints clearly when enrolling voters.

NEC has been researching and developing biometrics technologies well before other companies. In fact, it has researched and developed fingerprint matching technologies for 40 years and facial recognition technologies for 20 years. NEC's fingerprint matching technologies have consistently ranked No.1 in many benchmark tests carried out by the U.S. National Institute of Standards and Technology (NIST) since 2004. NEC's facial recognition technology also ranked No.1 in NIST benchmark tests conducted in fiscal 2010 and fiscal 2011. These strong technologies have a proven track record. For example, NEC's fingerprint matching solutions have been adopted by the police, judicial agencies, immigration control authorities, interior affairs ministries and other organizations in more than 30 countries around the world.

The people of Bolivia embraced the superior accuracy, reliability and scalability of the biometrics solution backed by NEC's advanced technologies, and the complete security of the data centers, combined with the CNE's dedication to completing their mission. This gave the Bolivian people the confidence they needed to register their personal data and participate in the elections.

#### Comment from the NEC manager



### "The key to the success of this project was the proposal of a highly secure and reliable solution."

Alejandro Aramburu Project Manager Project Management Division NEC Argentina S.A.

"I am proud that NEC's project proposal was recognized as the best choice among those submitted by companies participating in the CNE's international tender process, in terms of its high level of security and reliability of systems integration, optimal cost and speed of implementation. We succeeded in implementing this large-scale project without delays because of our detailed monitoring of logistics and thorough risk management. I'm delighted that we have made a positive contribution to the Bolivian people through this project."

#### **Helping to Achieve Truly Democratic Elections**

Previously, many Bolivian voters, including people with disabilities, people living in isolated areas, and overseas residents, were unable to participate in elections. However, with the implementation of the biometric voter ID solution, the voter list swelled from 3.5 million voters previously to 5.2 million voters. This allowed truly democratic elections to be held for the first time in Bolivia's history.

In fiscal 2011, NEC delivered solutions based on biometrics technologies to the Greek Ministry of Foreign Affairs and the Brasilia police, among other organizations. Looking ahead, NEC will continue to focus on the public safety field, as it contributes to ensuring safety and security around the world.

URL http://www.nec.co.jp/csr/en/report2011/ contribution/

## Universal Design (UD) Contributes to Creation of User-Friendly Airport

#### ~Flight Information System at Haneda Airport International Passenger Terminal~

The Haneda Airport International Passenger Terminal is Japan's new gateway to the skies. Therefore, the information displayed on the flight information system (FIS) inside the terminal must be easy for anyone to use and understand. In collaboration with NEC Design & Promotion, Ltd., NEC is contributing to more user-friendly airports by designing monitor displays that help anyone find accurate flight information quickly, even seniors or people with color perception deficiency.

#### An FIS that is Easy to Use and Understand

Haneda Airport opened its international passenger terminal on October 21, 2010 as Japan's new gateway to the skies. In constructing this new terminal, airport owner Tokyo International Air Terminal Corp. (TIAT) set out to create facilities tailored to the age of globalization. TIAT established an internal "Universal Design Committee" to oversee the design process. The aim was to create an airport that any visitor would find easy to understand and use, including people coming from overseas, seniors, those with disabilities, and children.

The FIS is a vital piece of airport equipment that displays varied flight-related information such as flight numbers, departure times and destinations. NEC was responsible for the development and installation of the FIS at Haneda's new international terminal. NEC has a track record in FIS design and delivery for other Japanese airports, including Narita, New Chitose, Niigata and Kitakyushu.

#### User-Centered Design (UCD) Development Process Utilized

NEC employed UCD, an approach to effective design, in the UD-based development process for the new FIS. This involved constructing system prototypes for actual user evaluation at each stage of the design.

For instance, with respect to the text shown on displays, designers opted for a typeface that seniors or others with weak eyesight would find easier to read, along with a larger font size to make numbers and letters easier to distinguish. The information layout was specially designed from a user standpoint by displaying data in the order of greatest user knowledge (scheduled flight departure time, any time changes, destination, and finally flight number). Multiple sample screens of data were prepared and displayed on the same large-screen monitors as those to be actually used in the airport. A range of users then evaluated these screens repeatedly at the company. Similar tests of color universal design, color combination and text contrast, and other parameters were conducted. The TIAT "Universal Design Committee" also conducted further on-site tests to evaluate such aspects of the design.

#### Before

¥ ا	🐔 Departures				現在時刻 Current Time 10:20
定刻/Time	行先/Destination	便名/Fight	使名/Fight	チェックイン/Check In	備考/Remarks
10:00	シドニー/SYDNY	J/L JL1001	haven 0F2002	A, B	出発済み/DEPARTED
10:10	ケアンズ/CAIRNS				
10:30	シンガポール/SINGAPORE	\$ \$0701		A. B	搭乗中/BOARDING
10:45	上海/SHANGHAI	ANA# NH2921		C, D	搭乗中/BOARDING
11:25	香港/HONG KONG	J¢L JL520		A, B	搭乗中/BOARDING
11:40	厦門/XIAMEN	ANA NH102		C, D	搭乗中/BOARDING
11:55	ホノルル/HONOLULU	🗛 🛲 🖬 🗛 🗛 🗛 🗛	J/L JL2002	A, B, E	出国手続中/GO TO GATE
		CO6110	Scource CX3321		

After

🞽 出発 [	Departures				11:20
定刻 変更時刻 Scheduled Estimated	行先 Destination	便名 Flight		チェックイン Check In	備考 Remarks
10:00 10:30	シドニー SYDNEY	J/L JL1001	📐 QF2002	AB	出発済み Departed
	CEIME ケアンズ CAIRNS				
10:30	シンガボール SINGAPORE	💄 SQ701		AB	出発済み Departed
10:45	上海(虹橋)SHANGHAI(HOGQIAO)	NH2921		CD	出発済み Departed
11:25	香港 HONG KONG	J/L JL520		AB	• 搭乗中 Now Boarding
11:40	厦門 XIAMEN	NH102		CD	• 搭乗中 Now Boarding
11:55	ホノルル HONOLULU	AA501	J/L JL2002	ABE	• 出国手続中 Clearing

FIS display before and after improvement

# An Easy-to-View Design with a Distinctively Japanese Appeal

Since FIS development occurred in parallel with terminal construction, NEC designers created simplified 3D models based on the construction blueprints to determine the surroundings for passengers looking at the flight information boards, as well as passenger positions, movement patterns and lines of sight. By using these 3D prototype models, NEC was able to test and develop effective designs to ensure that passengers would be able to access easily the flight information that they would need from the appropriate locations.

As befitting a major international gateway to Japan, the color scheme used for the displays was based on the concept of metropolitan progress blended with tradition through the use of a traditional slate gray. Designers also added a feature to vary the background for each flight to make it easier to understand the display, while building flexibility into the width of the field for flight numbers to allow for the growing number of codeshare flights. Such UD features give the FIS a distinctively Japanese appeal while also making it easier for users to read the flight information. They promise to enhance the presence of Haneda as the Tokyo Metropolitan Area's gateway to the skies.

Looking to the future, NEC aims to help forge a digital society that includes everyone by further enhancing the value of

#### Comment from the NEC manager

### "With UD, we are aiming to blend beauty and pleasantness with function."

Kazuhiko Yamaoka UCD Design Specialist\* Manager Design Division NEC Design & Promotion, Ltd. \* Certified by Human Centered Design Organization, a specified nonprofit organization



"We are accumulating universal design development and testing experience in the pursuit of UCD. One of NEC's basic universal design principles is 'Attractive and comfortable design.' Besides pursuing user friendliness and ease of understanding, we aim to constantly propose designs that users find attractive and pleasant, with the view of helping create an appealing society and lifestyles."

universal design as a means of promoting widespread engagement with society by different people. Please see NEC's corporate website for other case examples of universal design.

URL http://www.nec.co.jp/csr/en/report2011/cs/ud/



User testing with same-size display as those to be installed



FIS in the central area of the departure lobby



Design tests using 3D prototypes

# Earn Customer Trust

Since its founding in 1899, NEC has been developing a corporate culture under the motto "Better Products, Better Services," in which we create products and services that are more valuable to customers, and in which every one of us understands, considers, and quickly responds to what our customers expect in order to make NEC a company that is trusted and chosen by customers.

# Making Improvements by Listening to Customer Feedback

At NEC, one of the ways we improve the level of customer service is to use customer feedback from CS surveys and customer contact points to identify issues and study ways to improve them, thereby leading to improvements in the related business divisions.

The NEC Group Customer Satisfaction Questionnaire is an annual survey of corporate and public sector clients in Japan that is designed to find out how these clients evaluate NEC. Around 2,000 clients were surveyed in fiscal 2011.

Unlike conventional surveys that produce results for statistical analysis, this survey is one in which sales divisions immediately take the lead in following up with the customer after questionnaire responses have been received.

The overall evaluation in fiscal 2011 was better for the items "high-quality proposals" and "supply of information/proposal timing and speed," which had been highlighted as needing improvement in the previous year's survey. However, some comments received indicated a desire among some customers for more impressive proposals, as well as proposals and responses taking advantage of NEC's entire capabilities, which suggest more sales-led inter-divisional cooperation is still required in this area.

Following on from fiscal 2010, we continued to focus on the pursuit of better product usability by reflecting customer feedback in retail products such as mobile phones and personal computers.

# 20111 WINNER パートナー 満足度調査

NEC was ranked "No. 1 in Thin Client Category" and "No. 1 in PC & Servers Category" in the 13th Nikkei Computer Business Partner Satisfaction Survey. Source: Nikkei Computer (February 3, 2011 issue)

#### New "Sakusaku Mail™" Feature Enables Easy Text Input Even for Fast Typers

Responding to customer feedback about poor text input response and slow screen changes on existing handsets, the docomo STYLE series<sup>™</sup> N-01C and N-02C, and the docomo PRIME series<sup>™</sup> N-03C featured major improvements in text input functions and response time to enable rapid, easy handset operation.

Even fast typers who can input characters at 10 times per second find the system stress-free and easy to use for text input. The time required to switch completely from standby screens to the e-mail or message composition screens has also been reduced substantially (to approximately half the time compared with the docomo PRIME series<sup>™</sup> N-04B model).

- \* Sakusaku Mail is a trademark of NEC Corporation.
- $^{\ast}$  docomo STYLE series and docomo PRIME series are trademarks of NTT DOCOMO, INC.
- \* Deco-mail Pictograms are a registered trademark of NTT DOCOMO, INC.

Example: Comparison of response time from starting up e-mail from standby screen to completing an e-mail message with Deco-mail pictograms\*. \* Excludes text inputting time. \* Excludes text inputting time. \* Corean \* Screen \* Screen

> 6 [seconds]

### Internal Awards for Outstanding CS Activities

NEC has established an internal awards system, with the aim of fostering a corporate culture where employees find it worthwhile to help customers and share the joy of helping them within the NEC Group. NEC provides internal awards to business groups and individuals who work from the customer's standpoint and are applauded by customers. The awards are granted once a year, with criteria including the extent of collaboration with other divisions and the difficulty of activities. In the following section, we present a project that won a prize in the CS category of the NEC CSR Awards for fiscal 2011.

#### Implementing a "Work Together" Approach with Customers to Create Truly Customer-Oriented Systems

NEC possesses world-class technology and know-how in the field of automated mail processing systems. NEC systems are used to sort mail in over 50 countries worldwide.

In a project for Hong Kong Post to deliver an automated postal services system for the city, NEC teams implemented a "Work Together" approach with the customer to implement a system with higher performance than the original specification (this system was the fastest of its kind in the world in terms of processing speed at the time in 2009). As a result, NEC was commended highly by the customer.

NEC normally builds systems based on the specifications agreed to with the customer, but the limitations of communicating in writing mean that differences arise in understanding on occasion.

For instance, while the specifications may state that up to 40,000 items of standard-size mail can be processed per hour, in reality the mail varies considerably according to size, shape, and address format. This can reduce the actual performance relative to specification. Even if specifications are met under ideal



Automated mail processing systems

conditions, this would only be satisfactory from the manufacturers' perspective. As far as customers are concerned, the equipment would have failed to truly satisfy their requirements.

The "Work Together" approach aimed to solve such issues by creating joint step-by-step processes with an emphasis on face-to-face communication rather than relying solely on specifications in writing. This approach puts the voice of the customer at the forefront of the process, resulting in system creation based on full customer cooperation rather than a specification manual-driven production/installation process.

NEC aims to build customer trust based on this "Work Together" approach, which puts increased emphasis on communication with the customer. The goal is to be a business partner that solves issues cooperatively with the customer.

#### URL http://www.nec.co.jp/csr/en/report2011/cs/cs/

#### NEC Customer Communication Center (CCC): A General Customer Help Line

NEC has set up customer contact points to consult with customers and listen to their opinions and requests concerning each of its main product lines. The NEC Customer Communication Center (CCC) has been established as a general customer helpline for customers to ask questions when they are unsure about who to contact, among other instances. The CCC first strives to listen carefully to customers' opinions and requests and accurately understand the nature of their inquiries. It then promptly collaborates with the relevant business divisions to solve their issues. The CCC looks forward to hearing your opinions and requests.

#### **NEC Customer Communication Center**

Phone: 0120-190-395 (toll-free number in Japan) From mobile phones or PHS phones: 03-3454-3388 (Telephone charges shall be borne by the customer.) Business hours: 8:30-17:15, Monday to Friday (Excluding New Year holidays, national public holidays and company holidays)

Website: http://www.nec.co.jp/cs/en/voice\_cccactivity.html

# Empower Our People

Employees will play a crucial role in realizing the NEC Group Vision 2017 and the V2012 Mid-Term Growth Plan. The following are examples of how NEC is developing the human resources needed for expanding global business, one of the three key initiatives of V2012, as well as measures to ensure the occupational health and safety of employees.

# Cultivating Human Resources Who Advance Global Businesses

#### **Developing New Employees into Key Global Personnel**

In fiscal 2009, NEC launched "Global Track to Innovator (GTI)," a training program designed to develop key global personnel. The goal of the program is to foster globally viable innovators by stationing new employees overseas for a period of one to two years soon after joining NEC, allowing them to experience actual business operations abroad. NEC has already stationed a cumulative total of around 50 employees at its overseas sites as trainees to learn about operations worldwide. Going forward, NEC plans to operate this program annually on an ongoing basis.



A trainee stationed in the Philippines (far left)

#### Training Program for Senior Managers from the Asia-**Pacific Region**

NEC conducted a training program in Kuala Lumpur, Malaysia in September 2010 for 10 national staff senior managers responsible for managing core business operations at NEC subsidiaries across the Asia-Pacific region.

Besides developing business out of Japan in each of these regions, the program aimed to promote business creation by NEC's local operations based on cooperation with NEC Headquarters. The three-day program had three parts: understanding NEC's history and current business strategy; understanding one's own management style; and creating new business plans.

NEC plans to hold similar training programs during fiscal 2012 for various regions worldwide. Through these programs, NEC aims to foster autonomous business creation by regional operations.

http://www.nec.co.jp/csr/en/report2011/ URL employee/emp02.html

## Ensuring Occupational Health and Safety (OH&S)

NEC conducts OH&S activities at the Company-wide level, as well as at the business site level to address unique conditions faced by individual business sites. In fiscal 2011, NEC focused on introducing OH&S management systems.

NEC is working to obtain the OHSAS 18001 certification, an international OH&S management system specification. In fiscal 2011, this certification was obtained at the NEC Abiko plant, following certification of the NEC Sagamihara plant in fiscal 2010. NEC is also preparing to obtain this certification or implement equivalent systems at other worksites.



Cumulative Participation of 170,000 NEC Group Employees (Fiscal 2011)



The "NEC Make-a-Difference Drive" is an employee-led community involvement program directed at local communities. The program has been held worldwide since 1999 to put the skills, talent and expertise of NEC employees to good use in their communities and heighten their sensitivity to social concerns.

URL http://www.nec.co.jp/community/necmd/e/

# Strengthen Risk Management and Enforce Compliance

In accordance with the Companies Act of Japan, NEC Corporation has stipulated its Basic Policy on Internal Control Systems and is working to strengthen risk management and compliance activities. In this section, we highlight the areas of compliance, information security and business continuity, which are crucial to NEC's growth strategy for driving global business expansion.

### Cultivating Compliance, Information Security and Business Continuity for Advancing Global Businesses

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#### Compliance

Aiming to prevent compliance breaches that may arise in the course of global business expansion, NEC is implementing measures to help raise compliance awareness at overseas subsidiaries. From fiscal 2011, NEC has provided individual compliance guidance to personnel who will be stationed at overseas subsidiaries as senior executives. NEC strives to ensure that these personnel are well aware of warnings specific to the regions where they will be stationed.

In fiscal 2012, NEC will develop compliance systems at regional headquarters (regional management companies) in the five key global regions in order to strengthen its response to compliance risk associated with global business expansion. Furthermore, NEC has prepared guidelines for certain bribery prevention legislation that must be addressed by the NEC Group on a global basis, such as the U.K.'s Bribery Act 2010, which entered into force in July 2011. In this manner, the NEC Group has made a concerted effort to rigorously enforce compliance.

#### URL http://www.nec.co.jp/csr/en/report2011/ compliance/

#### **Business Continuity**

In various overseas regions, there have been frequent occurrences of natural disasters, accidents, infectious disease outbreaks and other such events, along with burgeoning geopolitical risk due to complex international affairs. Meanwhile, with the globalization of business operations, supply chains have become increasingly complex and technically advanced. This has led to concerns about the possible impact of global risk factors on the NEC Group's business operations. Under these circumstances, the NEC Group's overseas subsidiaries first created BCPs envisioning the fiscal 2010 outbreak of a highly pathogenic new strain of influenza. In fiscal 2011, overseas subsidiaries continued to formulate other BCPs for natural disasters and similar events. Overseas subsidiaries subject to BCP formulation developed BCP formulation frameworks by appointing BCM Practitioners. Using the NEC Group's standard guidelines, formulation support tools, and other resources, each of these overseas subsidiaries is formulating BCPs by identifying threat factors specific to the host country's circumstances, including natural disasters, political unrest, and terrorism, while documenting disaster scenarios.

URL http://www.nec.co.jp/csr/en/report2011/ continuity/

#### **Information Security**

NEC has been developing a personal ID management system for employees that will be used as a platform for securely and confidently sharing information and using work applications on a global basis. During fiscal 2011, NEC completed the installation of the personal ID management system for all NEC Group overseas subsidiaries linked to the NEC intranet (for approximately 13,500 individuals at 75 companies as of March 31, 2011). Through a common file encryption process, we have begun safely exchanging information and controlling information access throughout the NEC Group.

Furthermore, we briefed around 150 suppliers in the China region on the same information security measures requested of suppliers in Japan ("Basic Rules for Customer Support," confidential information management, etc.). We shared information on the status of information security incidents, and provided training materials.

#### URL http://www.nec.co.jp/csr/en/report2011/security/

#### Addressing the Issue of Mineral Resources that Fuel Conflict

Certain mineral resources, such as columbite-tantalite (coltan), cassiterite, gold, and wolframite, mined in the Democratic Republic of the Congo in Africa and adjoining countries have been reportedly used to help finance armed groups. These mineral resources may thus be responsible for triggering a rash of problems including tribal conflict, human rights abuses, and environmental destruction.

The NEC Group believes that the cooperation of a broad array of stakeholders is needed to solve this issue. For this reason, NEC has exchanged views on the issue with various human rights and environment-related NGOs, government agencies, and industry organizations in order to properly address this issue.

Going forward, the policy of working to ensure that none of these mineral resources are used in NEC's products will be shared throughout the NEC Group. The NEC Group will also seek the understanding and cooperation of its suppliers in this regard. After establishing transparency in the supply chain, the NEC Group will take steps such as responding to surveys from customers, and will make every effort to ensure that customers can use its products with peace of mind.

URL http://www.nec.co.jp/csr/en/report2011/supplier/

The NEC Group values the process of improving CSR management based on feedback from engagement with stakeholders. In accordance with the ISO 26000 standard issued in November 2010, NEC has implemented a dialogue and review process involving the newly formed "CSR Review Forum—Japan" (see page 23), with participation by CSR-related divisions and others of the Company.

The results of this process are outlined in the following Stakeholder Review. The NEC Group will continue to promote CSR management based on the ISO 26000 standard going forward.

# Summary of the Stakeholder Review from the CSR Review Forum—Japan

The NEC Group and the CSR Review Forum—Japan initiated an engagement and spent approximately six months in dialogue based on the ISO 26000 standard. This report summarizes the conclusions of the review.<sup>\*1</sup> Generally speaking, the NEC Group has a well-established CSR management structure and steadily promotes work on issues that it recognizes as priorities. The recommendations that follow focus on key issues.

### 1. CSR Management

The NEC Group has set a target of having overseas sales account for half of total sales in fiscal 2018 and is working to rapidly globalize its organization to this end. The NEC Group provides more than products and services for communications and social infrastructure. In recent years it has also been transforming itself from a company that provides information and communications equipment to a company that handles information itself. The NEC Group is deepening its bonds with the public and society in general through the medium of information.

Through this review we sensed that the most important CSR issue facing the NEC Group is integrating social responsibilities throughout an organization. The following lays out key points in tackling this challenge.

The first is that the NEC Group must constantly think about the sphere of its influence and responsibility from a business-to-business-to-consumer standpoint and grasp both the positive and negative impact of its information and activities on the public and society in general. The second is that the NEC Group must think about CSR in its main businesses and concretely promote it from the proactive perspective of using information to contribute to the development of a sustainable society and bolster its own competitive advantage, rather than simply from the perspective of protecting itself by preventing information leaks and the like. The third is that the NEC Group must first establish "due diligence" mechanisms focused on preventively and proactively ensuring that human rights harm, environmental destruction and other negative impacts do not occur. It will also be necessary to consider measures for avoiding complicity in order to prevent involvement in human rights harm perpetrated by third parties and prevent damage from being done without its knowledge. We expect the NEC Group to identify especially important issues and phase in measures that are integrated into the existing business processes.

# 2. Addressing the Core Subjects

# 1) Organizational governance

We found that rules for accountability, transparency and other social responsibilities are generally being followed in good faith. Going forward, the NEC Group must fully integrate and institute the basic principle of respecting, carefully considering and addressing for stakeholder interests in organizational governance processes.

The NEC Group has well-developed systems in place to promote social responsibilities and has the commitment of senior management. Going forward it will be important for NEC's CSR to make progress not only in administrative divisions but also in the company's business divisions as well. To this end, guided by The NEC Way, the NEC Group must further incorporate a social responsibility perspective into the strategies and targets of its main businesses and enhance communication across divisions rooted in CSR and led by the CSR division.

For this review, we conducted separate reviews of four areas related to organizational governance: compliance, risk management, information security, and business continuity. Overall, initiatives have progressed. With business continuity, we expect the NEC Group to review its response to the Great East Japan Earthquake and comprehensively report on it in the report in fiscal 2013.

#### 2) Human rights

Regarding human rights, we found that awareness of the issue is limited to the prohibition of discrimination. Facilitating understanding of the global human rights concept will be a task for the NEC Group going forward. Moreover, as required by the revised 2011 OECD Guidelines for Multinational Enterprises, the Group must develop "due diligence" mechanisms focused on preventive and proactive avoidance of complicity in human rights harm perpetrated by third parties and extend the mechanisms to domestic and overseas NEC Group companies and its suppliers.

#### 3) Labour practices

We conducted a review of general labour practices with particular focus on diversity, human resources development and occupational health and safety (OH&S). On the issue of diversity, respect for diversity is extremely important for further developing business activities globally and succeeding in multiple regions. In our view, diversity strategies and policies are also necessary from the standpoint of directly linking adaptability and innovation to diverse markets. Regarding OH&S, basic systems have been established at the NEC Group in Japan. The challenge going forward will be to enhance OH&S management in line with the global development of operations. To start, the current OH&S status of overseas sites should be ascertained. We also expect the "decent work" concept<sup>\*2</sup> to be promoted within the organization.

#### 4) The environment

The NEC Group is engaged in environmental management at factories and other sites, as well as exceptional initiatives related to reducing the environmental impact of society through its main businesses, with a view of achieving the goals laid out in the NEC Group Environmental Management Action Plan 2017/2030 established in 2010. Going forward, in

cloud services, smart grids, lithium ion batteries and other areas, we expect the NEC Group to provide products and services that go beyond conventional thinking to realize "Ecology through IT" by implementing a comprehensive strategy of differentiation-encompassing value creation from a general public and societal standpoint and stakeholder communication strategy—while facilitating coordination between the Smart Energy and Green Business Operations Unit established last year, the Corporate Communications Division and other departments. Regarding environmental protection in the supply chain, an area of rapidly mounting interest in recent years, we expect the NEC Group to grasp the current situation for each category of material and steadily implement initiatives while coordinating with the industry as a whole.

#### 5) Fair operating practices

On the issue of preventing corruption, we verified that the NEC Group plans to further strengthen global compliance systems in response to the enactment of the Bribery Act 2010 in the U.K.

On supply chain management, the Group continues to ascertain the current situation by establishing guidelines and surveying primary suppliers. The sphere of the NEC Group's influence extends to primary suppliers with which there is a contractual relationship, but the NEC Group recognizes the risk of problems occurring further upstream, and responded by indicating it would work with primary suppliers to address problems as necessary. Going forward, we expect the NEC Group to conduct on-site inspections of suppliers and partner with the rest of the industry to promote CSR-oriented supply chain management by suppliers.

#### 6) Consumer issues

Engaging in consumer issues necessitates the perspective of providing products and services that help consumers and society beyond the immediate business customer. The NEC Group emphasizes a business-to-business-to-consumer perspective, and its Core Values include "Think from a user's point of view." Going forward, the challenge will be how to increase opportunities for communication with general users and how to include business partners in initiatives. In addition, ISO 26000 identifies as consumer issues sustainable consumption, consumer education and other important areas where the NEC Group has the ability to contribute. The NEC Group can cite positive examples like the development of ATMs at convenience stores, and we expect it to tackle industry-leading initiatives so that its varied resources are employed for the sake of consumers.

#### 7) Community involvement and development

The next challenge for the NEC Group, a leader in social contribution activities, is incorporating a community development perspective into existing activities. Specifically, through its Make-a-Difference Drive, it is hoped that the NEC Group will help to reduce poverty in developing countries and elsewhere, and to solve environmental problems. We expect the NEC Group to add the perspective of "societal impact" to its assessment of social contribution programs, more strongly link human resources development with social contribution programs, and engage in full-scale development projects for impoverished people in developing countries.

Note: Let it be noted here that upon completion of this CSR review, the NEC Group made a commitment to formulate CSR policies referring to the recommendations provided by this review.

1. This review is a summary of key points under the ISO 26000 standard based on separate reports created for each area subject to review. 2. Decent work is the availability of employment in conditions of freedom, equity, security and human dignity.

#### July 10, 2011 CSR Review Forum—Japan

#### **Review Panel**



**Chief Reviewer** Tomohiko YAMAGUCHI The CSR Institute.Inc



Saburo KATO Japan Association of Environment and Society for the 21st Century



Konoe FUJIMURA Japan Association of Environment and Society for the 21st Century



Kaori KURODA CSO Network Japan

Reviewer Taro TAMURA



Yukiko FURUYA Nippon Association of Consumer

Specialists

# Reviewer

Center for Public Resources Development



Institute for Human Diversity Japan

About the CSR Review Forum—Japan

The CSR Review Forum—Japan (CRF) is a private, non-profit organization established through an alliance of civil society organizations (NGOs, consumer organizations, etc.) and individuals affiliated with those groups working to solve social issues and help bring about a sustainable society. CRF provides the CSR Review Program for independent reviews of corporate activities based on ISO 26000, the international standard for social responsibility.

#### Cautionary Statement Regarding the Stakeholder Review

- 1. This stakeholder review is provided based on the CSR Review Program offered by the CSR Review Forum—Japan.
- 2. Review means to reconsider, outline, critically comment, critically appraise, re-survey, report and look back, but generally speaking it means to "reexamine something." The CSR Review Program refers to recommendations made by stakeholders for bettering or improving corporate activities from the standpoint of social responsibility.
- 3. The CSR Review Program is not an assurance service. Recommendations provided by the program represent a candid view of the company's activities from a stakeholder perspective. They do not represent assurances to third parties on whether or not the company's activities are problematic or exceptional.
- 4. For the foregoing reasons, the CSR Review Forum—Japan and its affiliated organizations cannot be held responsible for any tangible or intangible impact, gain or damage, etc. incurred by the reviewed company or anyone reading the review report as a result of the CSR Review Program being provided.

# CSR Promotion Activities: Objectives and Performance

The table below provides an overview of the status of NEC's CSR promotion activities. For each of our three basic CSR policies, we summarize fiscal 2011 objectives and achievements, the degree of completion, as well as objectives for the medium term (fiscal 2011 to fiscal 2013) and fiscal 2012 objectives. (The entire content is disclosed on NEC's CSR Website).

Basic Policies	NEC'S CSR \ Key Items	Fiscal 2011 Objectives	Fiscal 2011 Achievements and Results
	_		
Strengthen risk management and enforce compliance	Business continuity	<ul> <li>Formulate BCPs at overseas consolidated subsidiaries for risks (other than new strains of influenza) that could materialize in each region and could impact business continuity</li> <li>Institute a full range of BCM activities for BCPs that have already been formulated</li> </ul>	<ul> <li>Identified overseas subsidiaries subject to BCP formulation. Each subsidiary developed a BCP formulation framework, while various support materials were provided from Japan to assist with BCP formulation.</li> <li>Implemented training drills, internal audits and other BCM activities in regard to BCPs for earthquakes at NEC Corporation and subsidiaries in Japan. Following on from fiscal 2009 and 2010, NEC continued to undergo BS25999 certification testing, and expanded the scope of certification.</li> </ul>
	Information security	<ul> <li>Reinforce information security at suppliers:</li> <li>Educational programs for instituting measures: approximately 2,000 suppliers</li> <li>Continuous implementation of supplier assessments: on-site and written assessments (approximately 2,000 suppliers)</li> <li>Increase technological support to more personnel at suppliers</li> </ul>	<ul> <li>Prepared educational materials for confidential information management. Around 2,500 suppliers entrusted with work from the NEC Group were requested to implement educational programs.</li> <li>Conducted on-site assessments and written assessments in writing using a Webbased system (implemented at just over 2,000 suppliers)</li> <li>Developed environments for securely sharing information with individual personnel at suppliers, while increasing the number of such personnel 1.4-fold year on year to 3,500</li> </ul>
	Supply chain	<ul> <li>Promote questionnaires based on the Supply-Chain CSR Check Sheet</li> <li>Analyze survey results and issue feedback reports to every supplier surveyed</li> <li>Support CSR enhancement measures at key suppliers mainly by preparing and providing CSR training materials and holding seminars for suppliers</li> </ul>	<ul> <li>Obtained completed surveys using the Supply-Chain CSR Check Sheet from all 46 suppliers surveyed</li> <li>Performed analysis of all 46 suppliers surveyed, and issued feedback reports to each supplier</li> <li>Prepared and distributed materials on environmental measures to suppliers. Support for CSR enhancement measures was offered by all NEC procurement divisions to key suppliers, based on their classification as software suppliers (quality and subcommittee activities) and hardware suppliers (on-site patrol and awards).</li> </ul>
Contribute to solv- ing social issues through business activities	Global environmen- tal protection	<ul> <li>Reduce the CO<sub>2</sub> emissions (power consumption by products during use converted into CO<sub>2</sub>) of all products (performance basis) by 60% on average compared with fiscal 2006</li> <li>Implement "Eco Appeal Proposals" using "Green Appeal Sheets" every year at a rate of two proposals per person on average</li> <li>Reduce energy-derived CO<sub>2</sub> emissions (total volume or energy equivalent) by 1% compared to fiscal 2010</li> </ul>	<ul> <li>Reduced the CO<sub>2</sub> emissions of products (performance basis) by 53% compared with fiscal 2006</li> <li>Implemented "Eco Appeal Proposals" at a rate of two proposals per person on average during the year</li> <li>Reduced energy-derived CO<sub>2</sub> emissions per unit of adjusted actual sales by 53% compared with fiscal 2010</li> </ul>
	Universal Design (UD)	<ul> <li>Offer training programs on harnessing user-centered design (UCD) to on-site development personnel. Increase the number of core product and service development activities led by worksites by cultivating experts who can take the initiative in development, using skills and expertise obtained from training programs.</li> </ul>	<ul> <li>Held seminars and small workshops for product developers, and for business divisions and Group companies, as part of efforts to promote UD/UCD activities within the Group</li> </ul>
	Promote CSR through business activities	• Step up efforts to incorporate CSR in business activities	<ul> <li>Conducted dialogue meetings and other events to promote internal dissemination of the Mid-Term Growth Plan "V2012"</li> <li>Formulated the NEC Group Environmental Management Action Plan 2017/2030. Established the Smart Energy and Green Operations Unit to promote smart energy and green businesses.</li> </ul>
Promote communi- cations with stakeholders	Customers	<ul> <li>Establish a customer-based corporate culture: Promote the development of the "One NEC" framework so that all NEC Group activities are based on customer needs, bolster NEC Group teamwork and foster a customer-oriented mindset among employees</li> </ul>	<ul> <li>Made progress in improving CS activities by monitoring conditions through the "CS Activity Survey" of domestic NEC affiliates and meetings to exchange opinions with these companies</li> <li>Upgraded and extended training programs aimed at fostering a customer-oriented mindset and CS management skills</li> <li>Created new plans for training programs to teach actual CS implementation along with facilitation skills for solving CS issues, upgrading the content relating to employee awareness and better management (About 2,500 people attended CS training.)</li> </ul>
	Shareholders and other investors	<ul> <li>Continue to strengthen IR activities led by management and IR staff</li> <li>Enhance IR activities for individual investors, by stepping up disclosure of information through the IR Website and company presentations for individual investors</li> </ul>	<ul> <li>Endeavored to increase direct dialogue with investors and securities analysts by proactively holding various management-led presentations</li> <li>Held company presentations for individual investors and stepped up disclosure of information through the IR website</li> </ul>
	Communities	<ul> <li>Implement two NEC original programs</li> <li>Improve and strengthen continuing programs from the perspectives of "relationships with medium-term themes," "links with business, including the use of IT" and "employee participation"</li> <li>Improve NEC Make-a-Difference Drive (MDD)</li> <li>Expand MDD activities within the NEC Group: Implementation rate (Number of sites implementing activities / number of registered sites): Fiscal 2010 43% -&gt; Fiscal 2011 50%</li> <li>Develop new common programs: formulate guidelines for corporate citizenship activities concerning biodiversity and expand activities globally</li> </ul>	<ul> <li>Launched new initiatives such as the NEC Social Entrepreneurship School Business Supporters and joint research with Keio University into potential BoP business development in emerging and developing countries</li> <li>Held the NEC Internship for Mothers Raising Children, an upgraded version of NEC IT Lectures for Mothers Raising Children. Launched NEC Cruise, a website providing information on volunteer work for NEC Group employees.</li> <li>Achieved an implementation rate of 50% for MDD participants. Formulated the NEC Group Biodiversity Contribution Activities Guidelines and held briefings for MDD participants. As a result, the number of participants in biodiversity preservation programs was 6,211, surpassing the Company's target.</li> </ul>
	Employees	<ul> <li>Further strengthen efforts to reduce extensive overtime. Strengthen support measures for employees who are balancing work and childcare responsibilities.</li> <li>Enhance interviews for helping people with disabilities settle into workplaces</li> </ul>	<ul> <li>Reduced the number of employees who have worked long hours. Revised the procedural manual for the childcare leave system.</li> <li>Conducted interviews and followed up on individual consultations with employees with disabilities</li> </ul>
		<ul> <li>Clearly identify human resources who are responsible for creating businesses, and establish a training framework for them</li> <li>Establish a systematic training framework for human resources selected on a global basis</li> </ul>	<ul> <li>Clearly identified human resources who will be responsible for creating businesses and defined personal qualities and skills required for these personnel. Established a training framework for human resources who will be responsible for creating businesses that matches "personnel with aptitude" with "opportunities to gain experience." Developed training courses designed to produce human resources responsible for creating businesses and to upgrade their skills.</li> <li>Formulated framework to train, appoint and evaluate executive candidates. Defined Global Key Positions. Plans call for creating HR development systems to help train candidates for Global Key Positions.</li> </ul>
		<ul> <li>OH&amp;S: Enhance quality by implementing OHSAS-level checks of OH&amp;S systems at each NEC worksite</li> <li>Industrial health: Achieve a Specified Health Examination implementation rate of 70%; and a Specified Health Guidance completion rate of 45%</li> </ul>	<ul> <li>Achieved OHSAS certification for the first time at Abiko Plant. Equivalent systems were introduced at other worksites.</li> <li>Achieved a Specified Health Examination implementation rate of 98.4%; and a Specified Health Guidance completion rate of 41.1%</li> </ul>
	CSR Overall	<ul> <li>Enhance CSR activities through the CSR Report production process and stakeholder feedback. Publicize these activities to enhance external evaluations.</li> </ul>	<ul> <li>Introduced a Stakeholder Review was based on the ISO 26000 approach</li> <li>Achieved improvement in CSR ratings and reviews; Maintained inclusion in the four major SRI indexes. The SAM Gold Class award was received for the first time. Also achieved inclusion in the "Global 100 Most Sustainable Corporations in the World" for the first time.</li> </ul>

(Degree of completion: O achieved	I O mostly achieved	riangle some progress	× no progress)
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Great East Japan	tute BCP and BCM activities spurred by issues arising from the Earthquake at NEC Corporation and subsidiaries in Japan	Revise and raise the effectiveness of BCPs throughout the NEC Group (both in Japan and
	for BCM activities at overseas subsidiaries	overseas) based on issues highlighted by responses to the earthquake disaster and other developments. Instill a strong awareness of business continuity in the organization's culture by instituting BCM activities.
measures, a globa	service authentication platform, a platform for computer security al platform for information leakage countermeasures, in order to curity infrastructure	<ul> <li>Implement comprehensive security measures from the standpoint of management, systems and human resources development. Protect information assets entrusted to NEC by customers and suppliers as well as NEC's own information assets. As a provider of IT products, services and solutions, deliver even more secure and reliable products, services and solutions to customers.</li> </ul>
	naires based on the Supply-Chain CSR Check Sheet (Selection of	Enhance suppliers' risk and compliance management capabilities
<ul> <li>Disseminate inform</li> </ul>	tion and collection, analysis and feedback) nation within the NEC Group and formulate policy measures with	
O developments and	nd actions required as a result of CSR-related industry the ISO 26000-based review (Examples include human rights, CSR audits and environmental preservation)	
into CO₂) of all pro with fiscal 2006. ● Implement "Eco A	emissions (power consumption by products during use converted iducts (performance basis) by at least 62% on average compared appeal Proposals" using "Green Appeal Sheets" every year at a rate on average per person	<ul> <li>Reduce the CO<sub>2</sub> emissions (power consumption by products during use converted into CO<sub>2</sub>) of all products (performance basis) by more than 65% on average compared with fiscal 2006</li> <li>Implement "Eco Appeal Proposals" using "Green Appeal Sheets" every year at a rate of three proposals per person on average</li> <li>Reduce energy-derived CO<sub>2</sub> emissions (total volume or energy equivalent) by 1% year on year</li> </ul>
	erived CO <sub>2</sub> emissions (total volume or energy equivalent) by 1% year	
Apply UD/UCD pr framework in colla management divis	inciples to actual projects and create a development process iboration with development worksites and the development process sions, with the view of promoting UD/UCD implementation and areness within the NEC Group	<ul> <li>Develop outstanding examples of innovative products and services in terms of universal design and manufacturing friendly to humans. Promote and entrench these examples at product development worksites.</li> </ul>
	ses that contribute to the realization of "an information society s and the earth" (Accelerate "V2012")	<ul> <li>Promote businesses that contribute to the realization of "an information society friendly to humans and the earth" (Achieve "V2012")</li> </ul>
NEC" framework s customer needs, i among employees • Steady execution received from con	mer-based corporate culture: Promote the development of the "One so that all Group activities in Japan and overseas are based on bolster Group teamwork and foster a customer-oriented mindset s. of improvement initiatives based on CS surveys and opinions sumers: Enhance ability to address problems, strengthen sales we product usability	<ul> <li>NEC gives top priority to providing products that can be used by customers with peace of mind. We therefore strive to improve the quality of employees, products and services, and business processes from the customer's point of view, with the aim of becoming the industry No. 1 in CS.</li> </ul>
	re of information about individual business operations ies for individual investors	Proactively provide information to shareholders and other investors based on "V2012"
means	w voluntary programs unique to NEC through the use of IT or other ms that assist with earthquake recovery efforts mainly from the	Promote programs that contribute to solving social issues based on the following themes:     Eliminating the Digital Divide (Helping to solve poverty issues in developing countries and
Standpoints of "for	cusing on socially disadvantaged people such as people with an and the elderly," and the "utilization of existing programs."	improving accessibility) - Social Innovation Developed by Entrepreneurs - Youth Education that Cultivates Creativity - Protecting the Earth's Environment and Biodiversity
60%.	vities among group companies: implementation rate in fiscal 2012: Der of participants in biodiversity preservation programs. Target: r fiscal 2011.	– Realizing a Diverse & Thriving Society
Further strengther	nce for ensuring respect for human rights on a global basis n efforts to reduce extensive overtime loyment of people with disabilities at NEC Corporation and its sidiaries in Japan	<ul> <li>Further promote a healthy work-life balance</li> <li>Achieve the statutory ratio of employees with disabilities at all NEC consolidated subsidiaries in Japan</li> </ul>
Redevelop tier-sp     Make Global Profi     Implement global     Support global bu     resources	pment systems to help train candidates for Global Key Positions ecific training programs to reinforce management capabilities assionals more visible and train these people Web-based training systems isiness expansion by training and utilizing a diverse array of human	<ul> <li>Cultivate human resources who will execute the "C&amp;C Cloud Strategy"</li> <li>Cultivate human resources who will advance global businesses</li> <li>Cultivate human resources across organizational boundaries</li> <li>Enhance worksite capabilities by enhancing management skills</li> </ul>
	ISAS certification at Tamagawa Plant. Conduct on-site disaster ety inspection interviews at affiliated companies in Japan. Ascertain	<ul> <li>OH&amp;S: Establish OH&amp;S management systems at each NEC worksite. Enhance the OH&amp;S management system for the NEC Group as a whole.</li> </ul>
<ul> <li>the status of occur</li> <li>Industrial health: A</li> </ul>	Achieve a Specified Health Examination or planes in Papar. Association Achieve a Specified Health Examination implementation rate of 99%; ealth Guidance completion rate of 45%	<ul> <li>Industrial health: Active a Specified Health Examination implementation rate of 80% and a Specified Health Guidance completion rate of 50% in fiscal 2013</li> </ul>
Promote improver based on the ISO	ments in internal initiatives originating from the Stakeholder Review 26000 approach	<ul> <li>Promote the dissemination of information (CSR reports, etc.) throughout the NEC Group on a consolidated basis, and enhance external evaluations</li> <li>Enhance ISO 26000-based activities</li> </ul>

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For further details, please see the NEC Annual CSR Report 2011 at the following URL:

# URL http://www.nec.co.jp/csr/en/

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Statements in this report other than historical or current facts are forwardlooking statements based on NEC's assumptions and beliefs in light of information currently available. We caution that these forward-looking statements are subject to changes in business conditions and other factors.

Evaluation by External Parties:

- Global 100 Most Sustainable Corporations in the World in 2011
- 6th place ranking based on the Environmental Management Level Survey by
- Nikkei Inc. (category: manufacturing) • Dow Jones Sustainability
- World Index, SAM Gold Class
- FTSE4Good Global Index
- ETHIBEL EXCELLENCE
   MS-SRI Morningstar Socially
- Responsible Investment Index
- oekom rated as Prime





This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact**.

We welcome feedback on its contents.

