CSR

NTT Communications Group CSR Report 2011

NTT communications Group
Corporate Social Responsibility Report 2011

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Top Commitment

As we work to find solutions to the issues facing society, it is with a renewed sense of purpose that we aim to be a "Global ICT Partner" in order to provide ICT solutions that contribute to a prosperous society and safe and pleasant lifestyles.

In recent years Japan's domestic market has matured because of low birth rates and an aging population, while the economy has become shrouded in uncertainty, attributable to deflation and the appreciation of the yen. Amid this environment, many Japanese companies are looking overseas to develop markets in Asia and other emerging countries as they search for growth opportunities, and the push for global business development is accelerating. Meanwhile, the ICT industry is in the midst of a transformative period, highlighted by the switch to broadband, the spread of smartphones and tablet computers, and advances in cloud technology.

Against this backdrop, we have formulated a new vision for our business, "Vision 2015," with this year marking the first year of our next step into the future.

As we strive to achieve the goals set forth in the new vision, we will work to upgrade our processes and restructure our organization in order to provide seamless services across all business divisions, to operate smoothly, and to meet our customers' needs both in Japan and overseas.

Also, as discussed in this report's feature, we will develop professional human resources capable of success both in Japan and overseas, and demonstrate our Group's total capabilities to the maximum extent possible.

Contributing to Society

In the current information society, we are keenly aware of how indispensable communications infrastructure is. Providing communications infrastructure that is safe, reliable, and able to withstand natural disasters is an important mission for us. The Great East Japan Earthquake, which struck on March 11, was an unprecedented disaster. Overall, the NTT Group suffered tremendous damage, which had an impact on many of our customers. Information is the lifeline of society, and it is essential that during a natural disaster communications infrastructure continue to function regardless of the situation. At NTT Communications, we believe that our duty to society is to restore services as quickly as possible and help customers improve their lives. Based on this belief, we garnered all of our efforts to address these priorities.

We will use this experience to safely and reliably provide communications infrastructure that is even better able to withstand natural disasters.

This July, our employees began volunteering to support the recovery efforts in areas impacted by the earthquake. We hope that our proactive volunteer efforts will help the affected areas to recover as quickly as possible.

Protecting the Environment

Over the years, we have worked proactively to protect the environment, establishing an environmental vision and implementing it through our environmental activities. Fiscal 2010 was a target year in the environmental vision. To further advance our initiatives, we enacted new targets and an environmental vision for the NTT Communications Group to achieve by fiscal 2020 and formulated a document named "Green ICT Vision 2020" to outline what this new environmental vision entailed.

Under the new environmental vision, we have added "preserve biodiversity" to our existing priorities of "prevent global warming," "reduce waste," and "reduce paper." Going forward, our efforts will be focused on three approaches: making ICT less energy intensive ("Green of ICT"), reducing environmental footprints by having customers use ICT ("Green by ICT"), and promoting environmental conservation activities by employees and their families ("Green with Team NTT"). Following the Great East Japan Earthquake, the supply of electric power is less stable than before, and the need for energy efficiency and conservation is more acute than ever, both from the standpoint of preventing global warming as well as ensuring a stable supply of electricity. In addition to making ICT more energy efficient, we will offer ICT services such as those that allow people to work from home and remotely, and contribute to energy efficiency and conservation in offices.

Respecting Our Employees

We are always aware that taking on challenges is important in order to address the changing business environment. In fiscal 2011, significant reforms will be necessary to achieve the objectives we have laid out in the newly formulated business vision. I would like for our employees to take on new challenges to become globally successful personnel who can lead our businesses into the future. To this end, we will continue to develop human resources who can communicate with people around the world and who respect human rights.

In Closing

I believe that being brave and reforming the NTT Communications Group with an eye towards achieving the objectives set forth in the new Vision 2015 will ultimately lead to resolving some of the problems that society faces. In August, NTT Communications upgraded its organizational structure, and overhauled work processes, in turn further revitalizing the company and making operations more efficient.

We must continually move forward in order to become a true global leading player.

Akira Arima
President and CEO
NTT Communications Corporation

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Our Approach to CSR

The NTT Communications Group established its Basic CSR Policy in June 2006. All efforts pursued by employees in line with this policy as part of day-to-day business constitute CSR activity.

Basic CSR Policy

Our CSR activities aim to contribute to community prosperity and sustainability worldwide by creating new value and resolving problems through the information and communications services we provide as a Global ICT Partner.

- Make society safer and more secure
- Offer new business models and lifestyles

Contributing to Society

Protecting the Environment

Respecting Our Employees

- Prioritize in all business activities
- Reduce society's environmental footprint through our services

- Respect diversity
- Provide workplaces that champion self-fulfillment
- Work with partners to maintain high ethical standards in meeting social responsibilities

As a Member of the NTT Group

NTT Communications established its Basic CSR Policy in keeping with the NTT Group CSR Charter. The entire NTT Group will take on initiatives to resolve issues facing society.

Click here for details on the NTT Group CSR Charter

The NTT Group CSR Charter

Safe and secure communication

Creation of a safe, secure and prosperous society through communications that serve people, communities, and the global environment

Team NTT communication

Communication between people and their communities

Communication between people and the global environment

Our Business Principles

We define "stakeholders" as all the entities that have relations of any kind with the NTT Communications Group. The term includes not only our customers, business partners and shareholders, but also competitors that our business activities influence, society as a whole and individual employees. Understanding the perspective and earning the trust of our stakeholders are essential to enabling the Group to continue to profit and grow. We shall always be aware of our ties with various stakeholders as we bridge their present and future potential.

For Customers

1 From a customer-first perspective, we will provide solutions and services that offer true value.
2 We will act responsibly and with pride as a member of the NTT Communications Group in responding quickly, flexibly, and with integrity to our customers.
3 We will establish enduring relationships of trust with our customers.

For Business Partners

1 We will maximize our cooperation with partners in order to offer the best possible value for our customers.

For Society

1 By providing more secure and innovative Internet services, we will contribute to the sound growth of the Internet society.
2 As part of our strong connection with society, we will contribute to global environmental protection.
3 We will understand and respect the cultures and customs of different nations.

For Competitors

1 We will abide by rules and compete fairly.

For Employees and the Workplace

1 We will recognize individuality and diversity, and mutually protect human rights.
2 We will trust and respect each other and create an environment that is conducive to personal development and fulfillment of our goals.
3 As an ICT company, we will make a maximum effort to protect security.

For Shareholders

1 We will disclose information concerning our business performance in a fair, accurate, and timely manner.
2 We will achieve sustainable growth as a company and seek higher benefits for our shareholders.

Examples of Communication with Stakeholders

Communication with Customers	We gather feedback from customer satisfaction surveys and take steps to improve satisfaction levels. · Voice of Customer (VOC) Survey, NTT Communications Forum
Communication with Business Partners	We work with our business partners to improve communications quality, thereby improving customer satisfaction with respect to quality. · Arcstar Carrier Forum (ACF), Customer Council, Partner Summit We published a policy on procurement in accordance with our Guidelines for Green Procurement to ensure fair procurement activities. · Communication with suppliers
Communication with Society	We work to raise awareness of issues and develop a clear understanding of situations by communicating with NPOs and external experts. · Dialog with stakeholders, various social contribution activities
Communication with Employees	To help maintain and improve motivation among employees, we use an appropriate human resources system, provide a forum for communication with management, and make sure to reflect employees? feedback. · Dialog with president, KAIZEN Direct Line.

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CSR Priority Activities Established

The NTT Communications Group CSR Priority Activities were established in fiscal 2011.

In March 2011, we established the NTT Communications Group CSR Priority Activities in order to promote CSR activities in unison with the entire NTT Group. When formulating these activities, we referred to the NTT Group CSR Priority Activities, which were chosen from the list of NTT Group CSR Activities based on the NTT Group CSR Charter and other policies. Looking ahead, we are determined to fulfill our social responsibilities and corporate mission with an emphasis on these priority activities.

Four Priority Areas Defined

We have defined four priority areas, consisting of the three elements of our Basic CSR Policy and corporate governance, which is essential to corporate activities. Priority activities have been established in each of these priority areas.

Area 1 Society

We shall constantly endeavor to enhance Information and Communication Technology (ICT) as we provide stable and highly reliable ICT services worldwide with the aim of achieving a safer and more secure society.
Furthermore, we shall work to create new value for society, while helping to build inclusive communities in which all people can fully participate.

[Priority Activities]
· Develop ubiquitous network infrastructure
· Ensure highly stable and reliable mission-critical infrastructure
· Engage in social contribution activities

Area 2 The Environment

We are committed to actively safeguarding the Earth's natural environment in all stages of business operations, while helping to develop an environmentally friendly society through the provision of ICT services.

[Priority Activities]
· Prevent global warming
· Reduce waste
· Reduce paper
· Preserve biodiversity

Area 3 Human Resources

We shall respect the diversity of every employee while building worksites that enable each employee to reach his or her full potential. At the same time, we shall fulfill our social responsibilities through our business activities in adherence to high ethical standards.

[Priority Activities]
· Respect diversity and take steps to promote equal opportunity and other objectives

Area 4 Corporate Governance

We shall strive to enhance corporate governance as the foundation for sound business activities, with the view to remaining a highly trusted enterprise at all times.

[Priority Activities]

· Ensure information security

We have formulated a new Medium- and Long-Term Environmental Vision for fiscal 2020.

Based on our Global Environmental Charter, the NTT Communications Group has established its Long-Term Environmental Vision as a guide for carrying out environmental preservation and protection activities. As a concrete step toward achieving this vision, we have also created our Green ICT Vision 2020, which includes specific numerical goals through fiscal 2020.

Global Environmental Charter

Our Basic Philosophy

The NTT Communications Group will actively pursue conservation of the global environment and help to bring about an environmentally friendly society through all facets of its creation and provision of high-quality services benefiting customers across the globe.

Long-Term Environmental Vision

We will take advantage of the global reach of our telecommunications networks and the latest ICT advances to provide platforms enabling the exchange and sharing of knowledge which is unevenly distributed across the world, and also to support communication among people around the globe. In this way, we can help to bring about a sustainable, spiritually rich society.

Click here for details on our Long-Term Environmental Vision

Green ICT Vision 2020

By promoting our three "eco" initiatives of Green of ICT, Green by ICT, and Green with Team NTT, the NTT Communications Group is committed to helping enrich and streamline social activities, and to supporting the harmonious coexistence of all living things on our beautiful planet.

Our three "eco" initiatives:
Green of ICT
Green by ICT
Green with Team NTT

Realization of a Low-Carbon Society   **Efficient use of energy**
We are working to realize a low-carbon society through such initiatives as promoting the introduction of top-runner equipment, refurbishing and upgrading to high-efficiency air conditioning systems, enhancing lighting using reflectors, LED and other devices, introducing high voltage DC power supply systems and expanding the use of natural energy sources.

Click here for details on these initiatives are available on the following website.

Promotion of a Recycling-Based Society   **Effective utilization of materials and resources**
We are promoting a recycling-based society through such initiatives as clarifying and thoroughly implementing recycling guidelines, promoting thermal recycling, achieving zero emissions* for all removed telecommunications equipment, and reducing the volume of office paper used.

* Zero emissions: The NTT Communications Group considers a final disposal rate of 1% or less to satisfy zero emissions conditions.

Click here for details on these initiatives are available on the following website.

Preservation of Biodiversity   Protection of species facing the risk of extinction

We are working to preserve biodiversity through such initiatives as promoting construction work based on consideration for biodiversity, revising our biodiversity preservation guide, and promoting environmental protection programs undertaken by employees and their family members.

Click here for details on these initiatives are available on the following website.

Fiscal 2020 goals	
Reducing CO$_2$ emissions	**318,000 t-CO$_2$ or less** (Reduce by 15% or more from the fiscal 2008 level)
Reducing the volume of waste generated	**Final disposal rate: 2% or less** (Final disposal rate = Volume of waste transported to the final processing site/Total volume of waste generated)
Reducing the volume of office paper consumed (conversion to A4-size sheets)	**8,500 sheets per employee** (Reduce by 30% from the fiscal 2008 level)

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Special Feature 1: Reliably and Securely Bridging the World

Continuing to Bridge at All Times

Contributing to Society

Reliable Maintenance Service, 24 Hours a Day, 365 Days a Year

The NTT Communications Group's communications network supports the foundation of the information society on a global scale. Our mission is to provide stable communications services to customers and to continue to bridge society. In order to be prepared for unforeseen natural disasters or accidents, we have installed multiple transmission routes and redundant communication equipment worldwide. We have also established one-stop maintenance and monitoring around the clock all year round to provide highly-reliable communications services. Furthermore, while giving due consideration to our employees' work schedules, we operate and manage our network services around the clock, and have put in place a high-quality, highly efficient and reliable maintenance system.

Operation & Maintenance Framework

24 hours a day, 365 days a year

▶ Building Networks that Withstand Natural Disasters | ▶ Specific Examples of Activities | ▶ Response to the Great East Japan Earthquake

Building Networks that Withstand Natural Disasters

At the NTT Communications Group, we handle natural disasters based on the following three principles: maximize network reliability, maintain critical communications, and quickly restore all communications services.

[Maximize Network Reliability]
We have enhanced network reliability through initiatives to increase redundancy, such as installing multiple transmission lines and redundant communications equipment.

- Building strong facilities in buildings capable of withstanding a seismic intensity 7 earthquake
- Protecting against fires by using fireproof doors and fire-resistant cables
- Keeping emergency power supply equipment for use in the event of a prolonged power outage
- Enhancing security through stringent entry/exit control

- Establishing disaster prevention operation plans and conducting regular disaster response drills in accordance with the Basic Act on Disaster Control Countermeasures and the Act Concerning the Measures for Protection of the Civilian Population

[Maintain Crucial Communications]

As a designated public institution, we partner with government institutions and local governments on a variety of initiatives aimed at securing crucial communications in the event of a natural disaster.

- Securing emergency communications with the police, fire department, local governments and other organizations in order to provide support during disasters and to help with restoration efforts
- Providing a Disaster Emergency Message Dial (171) service that can be used to confirm the safety of people and for emergency contact during disasters

[Quickly Restore All Communications Services]

When a natural disaster strikes, we establish a company-wide framework to handle any problems. This includes immediately establishing a disaster management headquarters. We aim to quickly repair any damaged electrical communications equipment and restore services.

- Establishing organizations responsible for responding to the disaster, including a disaster management headquarters
- Quickly dispatching power supply vehicles and deploying disaster response equipment such as emergency restoration cables
- Transporting personnel as well as recovery equipment and materials via helicopter

Click here for details on disaster readiness and response measures.

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Specific Examples of Activities

Quickly Restoring Services in the Event of Major Damages to the Global Network

The NTT Communications Group has constructed a global network prepared for large-scale damages from natural disasters. In the event that a fiberoptic submarine cable were to be severed, it would be detected by an alarm and a host of measurements would be made to identify the location of the cut within several tens of meters. Thereafter, a cable-laying vessel would travel to the damaged location as quickly as possible to perform repairs, and a Remotely Operated Vehicle (ROV) capable

ROV capable of submerging to a depth of 2,500 meters

of submerging to a maximum depth of 2,500 meters would pull up the cable for repair. We have also partnered with telecommunications providers around the world to secure a variety of detour routes that would allow us to quickly restore any disrupted communications services. Furthermore, fiberoptic submarine cables are connected in loops, enabling automatic restoration in the event of damage, and providing cable redundancy. As a result, our network is strong in the face of disasters.

Focusing on Network Reliability in Times of Disaster

The NTT Communications Group focuses on securing network reliability by building networks capable of withstanding disasters. This effort includes preparing for unprecedented calamities predicted to occur in the future, such as strong earthquakes, torrential rains, and tsunamis.

Digging up a severed cable

In the event of an actual earthquake beneath the Tokyo metropolitan area, we would first set up an Initial Response Headquarters in the Kansai region of western Japan. In the Tokyo metropolitan area, members of the Disaster Response Headquarters would gather from offices or homes. Within 24 hours of the earthquake, the Tokyo Metropolitan Area Response Headquarters would be functioning and take over disaster response duties from the Kansai region. It would then begin to restore the interrupted network in accordance with the pre-determined order of priority.

To overcome communications disruptions in the core network among cities, we have developed a Disaster Recovery System that enables autonomous system rebuilding. Once the location and extent of the failure are identified, detour routes are designed and equipment settings are made.

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Response to the Great East Japan Earthquake

NTT Communications suffered major damages from the Great East Japan Earthquake which struck on March 11, 2011. Two of our three transmission lines running from the Kanto region (including Tokyo) to the Tohoku region of northeast Japan were completely severed. Of the two completely severed routes, we assumed that the tsunami had caused tremendous damage to the Pacific route, so we hurried to begin repairing the inland route. We arrived in the disaster area the following day, and on the morning of March 13, we began to work with local companies to install utility poles and otherwise work to restore services. We successfully restored the inland route approximately 50 hours after the earthquake struck.

Voice

"I felt the weight of our responsibility to support the facility."

The day after the earthquake, I went to the disaster-stricken area by helicopter. The situation was still dangerous, as the full extent of the damage was yet unknown, but nonetheless we made the decision to go there as quickly as we could. As the group worked around the clock on disaster recovery, I felt the weight of our responsibility to support the country's internal communications infrastructure and strongly felt the employees' dedication as we worked together and gave all we had to the effort. In that sense, it was a very valuable experience for me.

Ken Ishii
Senior Manager
KAIZEN*
Process and Knowledge Management
(formerly Senior Manager, Network SE Division of Core Network Department, Network Business Division)

* Continuous improvement

Glossary

Multiple Transmission Routes

NTT Communications has developed multiple transmission routes across Japan, so in the event that one route suffers damage, its functions are automatically switched to another route to secure communications.

Redundant Communications Equipment

Two units of the same equipment are installed to ensure communications in the event of a failure.

Designated Public Institution

Refers to a public institution designated by the Prime Minister, as stipulated in Article 2-4 of the Basic Act on Disaster Control Countermeasures.

Special Feature 2: Bridging to Reduce Environmental Footprint

NTT Communications provides environmentally friendly technologies and services.

Protecting the Environment

Using the power of ICT to create a society that is friendly to the global environment, people and all other living things

In addition to creating the highest level of services across the world, the NTT Communications Group works to realize an environmentally friendly society. Our Global Environmental Charter articulates our goal of actively pursuing conservation of the global environment. With this environmental vision having reached its target year in fiscal 2010, we formulated the new "Green ICT Vision 2020," which sets forth our environment-related objectives with an eye to 2020.

Fiscal 2020 Targets
Reducing the NTT Communications Group's Own CO_2 Emissions

318,000
tons-CO_2 or less

Utilizing new energy-saving technologies and facilities, we will reduce CO_2 emissions by 15% or more compared to the fiscal 2008 level.

Fiscal 2020 Targets
Reducing Society's CO_2 Emissions

2million
tons-CO_2 or more

By providing ICT services, we will contribute to the reduction of society's overall CO_2 emissions by 2 million tons or more.

▶ Green ICT Vision 2020 | ▶ Specific Examples of Activities | ▶ Energy-Saving with ICT Services

Green ICT Vision 2020

By promoting our three "eco" initiatives of Green of ICT, Green by ICT, and Green with Team NTT, the NTT Communications Group is committed to helping enrich and streamline social activities, and to supporting the harmonious coexistence of all living things on our beautiful planet. Based on the vision these initiatives entail, we will strive to reduce the environmental impact of all our business activities, with the three aims of realizing a low-carbon society, promoting a recycling-based society and preserving biodiversity.

Green of ICT
We will mitigate the environmental impact of our ICT equipment and facilities, applying increasing technology and process innovation each time we replace them for upgrades, thereby raising their efficiency and reducing the electricity they consume.

Green by ICT

We reduce society's environmental impact through the use of ICT to improve transportation efficiency for people and goods as well as more efficient use of energy, and by moving away from resource-intensive operations to, for example, a paperless workplace.

Green with Team NTT

In addition to carrying out their business activities, each and every Group employee practices eco-friendly activities to reduce the environmental impact in their workplace, home and local community.

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Specific Examples of Activities

Contributing to Society with the Newest Telecommuting Model Green ICT Utilizing "Biz Desktop Pro"

"Biz Desktop Pro" is a service that allows users to access their workplace PC environment from their home computer simply by inserting a dedicated USB device. This works by accessing a virtual PC on the cloud via the Internet, and enables users to use internal resources from outside the company while also ensuring security.
With this dedicated USB device, users can easily create their own work environment. In addition to helping to reduce a company's power consumption, "Biz Desktop Pro" enables a variety of working styles through remote access from any location, and also enables business continuity planning (BCP) in the event of a major natural disaster.
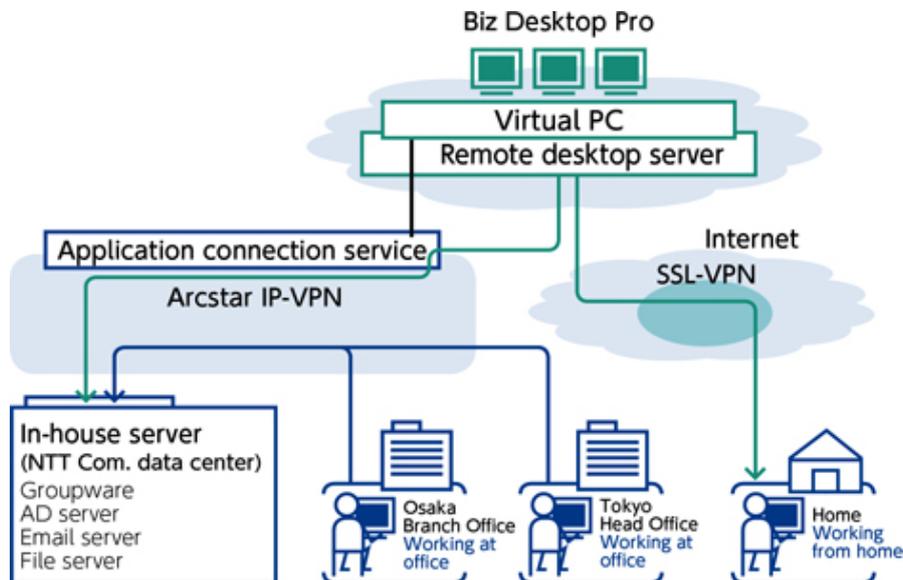
Contributing to Society with the Latest Green ICT Technology

In addition to increasing data center demand, society is demanding that ICT equipment consume power more efficiently and be able to withstand natural disasters. At NTT Communications, we are focused on building world-class data centers featuring cutting-edge green ICT capabilities. In April 2011, the Tokyo No.5 Data Center was completed and entered service.
The Tokyo No.5 Data Center is housed in a high-performance earthquake-proof building that is capable of withstanding an

earthquake as strong as the Great East Japan Earthquake or the Great Hanshin Awaji Earthquake. The data center is also equipped with high-efficiency power generating equipment and an advanced air-flow management system capable of reducing energy use by up to 35%. As a result, the PUE (Power Usage Effectiveness) is under 1.45, giving the data center one of Japan's highest levels of environmental performance.

We also contribute to society through our comprehensive, continuous efforts to make our overseas data centers more eco-friendly.

Voice of Sales Staff

Our customers appreciate being able to access their office working environment from anywhere simply by inserting a dedicated USB device, and also like the fact that they do not need to worry about security, as information leaks are protected against with SSL-VPN and by using a screen transfer method that leaves no data on the computer. No complicated settings are required, and customers also like the fact that a connection speed of 1Mbps is enough to comfortably access the system, and that it allows them to significantly reform the working styles of employees.

Masayuki Tamura
Application Services
Applications and Content

On the day of the Great East Japan Earthquake, construction workers working on a high floor of the building felt some light shaking. When they looked outside they saw other buildings shaking violently. Customers feel safe knowing that the earthquake-resistant design of the building and equipment will offer strong support for their business continuity planning. They also appreciate the fact that it is an energy-efficient, green data center equipped with solar panels, LED lighting and other eco-friendly features.

Hiroshi Seo
Manager
Data Centers
Cloud Services

Energy-Saving with ICT Services

Using ICT services is an effective way for companies to save energy. Cloud services utilizing virtualization technology and moving servers to data centers allow companies to reduce power consumption as well as continue business operations in the event of a natural disaster or sudden power outage.

Furthermore, creating a remote access-based work environment also helps reduce office power consumption by facilitating telecommuting and changing how people work in other ways.

Glossary

Dedicated USB Device

A USB memory stick that contains the functions required to use "Biz Desktop Pro." Inserting this dedicated USB memory stick into a PC allows users to access "Biz Desktop Pro" from anywhere.

SSL-VPN

Encrypted communications technology used to ensure security when communicating via an Internet web browser. SSL-VPN stands for Secure Sockets Layer Virtual Private Network.

PUE

Short for Power Usage Effectiveness, PUE indicates a data center's energy efficiency. PUE is found by dividing the data center's overall power consumption (power consumption of ICT equipment + power consumption of air conditioning/lighting, etc.) by the power consumption of ICT equipment. The closer to 1.0 the value is, the higher the energy efficiency.

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Special Feature 3: Using Global Capabilities to Bridge

Developing Human Resources Capable of Succeeding on a Global Level

Respecting Our Employees

With the domestic market maturing and recent economic uncertainties, Japanese companies are increasingly looking to globalize their operations. As a result, more and more Japanese companies are proactively sending employees overseas and hiring foreign nationals. We are promoting "seamless operations in Japan and overseas," so it is critical that we develop global human resources.

In addition to developing human resources of working globally, we are focusing our efforts on developing "professional human resources" equipped with knowledge, experience, on-site capabilities, as well as people skills.

Number of planned participants in the fiscal 2011 GHRM program Training of Japanese staff overseas

50 trainees

Number of planned participants in the fiscal 2011 GHRM program Training of employees of overseas subsidiaries in Japan

30 trainees

▶ Promoting Global Human Resource Management Across National Borders | ▶ Specific Examples of Activities | ▶ Composition of NTT Communications Group Workforce

Promoting Global Human Resource Management Across National Borders

Responding to the needs of customers expanding their businesses on a global scale requires a corporate culture that utilizes diverse human resources, beyond just differences in nationality. We promote Global Human Resource Management (GHRM) under the slogan of "Global One Team." We embrace different nationalities, values and positions. Based on this approach, we actively utilize global human resources and create and provide opportunities for personal growth for each employee, while managing human resources in a way that is best for the Group overall, and sharing our vision.

[GHRM Policy]

Human Resource Development Targeting All Employees

· Harnessing Global Human Resources

Throughout the global NTT Communications Group, we are actively moving employees of overseas subsidiaries between these subsidiaries, as well as promoting exchanges of

personnel with Japan. As we aim to further make the most of diverse human resources regardless of nationality, from fiscal 2012 more than 10% of the new hires at NTT Communications will be foreign nationals.

· Human Resource Development Aimed at Globalization

Certain employees are sent abroad from Japan as trainees in order to learn about technologies and obtain skills through on-the-job training at overseas subsidiaries, to cultivate a global mindset while expanding their perspectives through experiences overseas, and to encourage growth and development as global human resources. In addition to a "Global Challenging Program (Advanced Trainee)" targeting mid-level employees, from fiscal 2011 we are implementing a program targeting first-year or second-year employees.

· Management Including Overseas Subsidiaries

We are carrying out efforts to build a common GHRM platform, with an aim to share our basic GHRM philosophy and rules, and to put the right people in the right positions, regardless of nationality.

Click here for details on GHRM.

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Specific Examples of Activities

"Global Challenging Program (Trainee)" for First-year or Second-year Employees

In an effort to quickly develop employees capable of working successfully overseas, NTT Communications conducts a program for first-year or second-year employees to work overseas called the "Global Challenging Program (Trainee)."
The human resources development policies are based on "firsthand experience on the front lines," because we feel that true opportunities for growth can be found on the front lines. From fiscal 2011, this program is being expanded to target first-year and second-year employees. The program allows these employees to obtain globally applicable business skills by actually working overseas.
On top of their daily work duties, while working overseas the employees submit periodic reports as part of the program to follow up on their development. Employees work overseas for one year. In fiscal 2011, 50 employees were stationed overseas, with plans to increase this number going forward.

Training in Japan for Employees of Overseas Subsidiaries

NTT Communications invites employees of overseas subsidiaries to work in Japan through six-month and two-year training programs. As of January 2011, a total of 26 employees from 12 subsidiaries in the U.S., Europe and Asia are working in Japan.
As globalization in the business world rapidly accelerates, exchanging employees with overseas subsidiaries holds the tangible advantage of fostering an understanding of diversity that goes beyond differences in language and culture. Going forward, we will continue these exchanges of personnel from an even more global perspective as we strive to firmly establish a culture of diversity and solidarity in the Group.

Voice of Participating Employee

I took up this two-year program so as to understand the situation and perspectives of HQ and to share my experience with our HQ colleagues by working together. This program gave me opportunities to work with many overseas affiliates from HQ, and share our common goal of winning customers and serving them as a global ICT partner.

Tay Liza Swee Eng
Two-Year Training Program
NTT Singapore Pte. Ltd.

India is an emerging country where globalization is rapidly advancing. In this climate, I realized that to compete with international carriers in the Indian market, it's necessary to learn global business processes and a global business approach suited to different markets. I am confident that this program will enhance my career and contribute to the future growth of NTT Communications India.

Sushil Kulkarni
Six-Month Training Program
NTT Communications India Private Ltd.

Composition of NTT Communications Group Workforce

While there were approximately 2,000 overseas employees until a few years ago, this number has increased to nearly 5,000 employees.
Going forward, the Group will continue to embrace different nationalities and values, and create opportunities for all employees to succeed at work.

Group Companies (Japan)
17%

Overseas Subsidiaries
31%

NTT Communications (non-consolidated)
52%
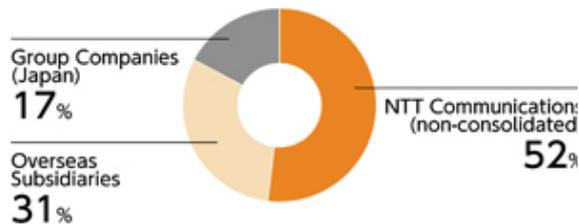
As of March 31, 2011

Glossary

Global Human Resource Management (GHRM)

A human resource development policy for developing human resources capable of working on a global basis across national borders.

Professional Human Resources

Personnel equipped not only with expert knowledge, but also with on-site capabilities and people skills, as well as the combination of necessary knowledge and experience from both internal and external viewpoints.

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CSR Index 2011

Based on our basic CSR policy, we established indices for the actions we are taking to contribute to society, protect the environment, show our respect to employees, and implement corporate governance. We perform self-assessment on the results of these indices, then revise and improve upon them for the following year.

Establishment of New Indices

We have established new CSR indices that reflect our newly formulated CSR Priority Activities. Based on indices for each of these four CSR Priority Activities, we will continue to steadily conduct various CSR activities.

Priority Activities	Measures	Target
Contributing to Society		
Develop ubiquitous network infrastructure	Provide Arcstar Universal One	Arcstar Universal One is a next-generation network service designed to ensure continuous and secure connectivity with cloud computing environments. We will work to enhance the user friendliness of this service by successively adding various functions that address customer needs, in order to solve the ICT issues faced by corporations.
	Provide Reliable and Secure Hosting Services	We will provide platform services centered on BizHosting in order to realize a ubiquitous environment in which devices of all kinds can be reliably, securely and easily connected from any location. We will strive to further upgrade and extend our range of services, in an effort to boost user friendliness.
	Provide Biz Mail cloud computing email service to corporate customers	This service is a cloud computing e-mail service featuring highly reliable service operations and security levels. It enables companies to reliably and conveniently conduct operations anywhere, anytime. As such, we will work to further upgrade and extend this service.
	Provide highly stable and reliable data centers	IWe will work to maintain and enhance quality by applying Information Technology Infrastructure Library (ITIL®)*1-compliant standards to various subsidiaries in Japan and overseas. Also, we will constantly strive to enhance data center quality while maintaining and upgrading data centers, with the aim of achieving disaster-resilient data center operations.
	Provide Mobile Connect Safety Confirmation and Notification Service	This service is an effective means of ensuring business continuity in the event of an emergency such as a natural disaster or influenza outbreak. Aiming to provide services that customers can securely access in the event of such an emergency, we will work to adapt the service to various situations in which it may be utilized, while further upgrading and increasing related functions.
	Provide reliable and secure OCN services	We will constantly strive to upgrade and expand services so that all customers, irrespective of age group, can reliably access an Internet environment.

Ensure highly stable and reliable mission-critical infrastructure	Develop disaster-resilient networks	We seek to build a disaster-resilient society by providing high-quality ICT services through multiple transmission routes, the distributed location of important communication centers and other initiatives in preparation for emergencies.
	Measures to address major natural disasters and similar events	We will upgrade disaster drills assuming hypothetical scenarios including a major natural disaster extending to the Tokyo metropolitan area and rolling blackouts. We will refine and entrench crisis management processes in close cooperation with central and local governments.
	Implement network surveillance 24 hours a day, 365 days a year	We will provide surveillance of services for customers (networks, Internet, cloud computing, hosting, and voice services, etc.) at all times, while promoting seamless global responses.
	Ensure the reliability and security of corporate information systems	Corporations are being increasingly called upon to monitor and control the sound and effective operation of information systems. In this context, we will actively work to ensure the reliability and safety of the corporate information systems we are contracted to service, with 24-hour, 365 days-a -year operations, as we address a variety of changes in society.
Social contribution activities	Participate in community beautification programs and other social contribution activities	We aim to achieve this target by implementing various clean-up programs and other activities, and tying them into NTT Group initiatives. **3,000 participants**
	Promote the Ecocap Movement of collecting and selling used plastic bottle caps to fund vaccines	We will work to collect plastic bottle caps as part of a concerted initiative throughout the NTT Group. Collect **1,750,000** plastic bottle caps
Protecting the Environment		
Global Warming Prevention	Reduce CO_2 emissions	Consider and implement new measures to reduce power consumption, such as setting PCs to power conservation mode, expanding the automated control of air conditioning systems in telecommunications buildings, and monitoring power sensors. CO_2 emissions*2: **315,000** tons-CO_2 or less Environmental ef?ciency index for CO_2 emissions: **4.00** (Million yen in sales per tons of CO_2 emitted)
Reduction of waste	Reduce office waste	Recycling rate: **76%** or more Environmental ef?ciency index for waste processing: **1,274** (Million yen in sales per tons of final disposal volume)
Reduce paper resources	Reduce paper consumption	Implement ICT-driven paper reduction initiatives; strictly enforce double-sided printing and reduced-size printing. Paper consumed per employee (A4 equivalent): **9,300 sheets** Environmental ef?ciency index for paper usage: **333** (Million yen in sales per tons of paper used)
Preservation of biodiversity	Protection of species facing the risk of extinction and related priorities	We will promote business activities giving consideration to biodiversity based on environmental assessments.

Respecting Our Employees		
Respect diversity and take steps to promote equal opportunity and other objectives	Promote diverse working styles by extending work-related reforms across the Company	We will promote a diverse range of working styles, such as telecommuting, by implementing initiatives designed to take a new look at how people work according to business sector, with the aim of promoting more highly productive working styles.
	Enhancing support for balancing child raising/nursing care responsibilities and careers	Besides implementing conventional work-life balance measures, we will expand the scope of these measures to male and younger employees, as well as other personnel, while extending these measures horizontally across the Group, to ensure that all employees can work energetically with a good work-life balance.
	Improve the Statutory Disabled Employee Ratio	Going beyond maintaining the statutory disabled employee ratio at NTT Communications, we will implement various activities designed to improve the Group-wide statutory disabled employee ratio.
	Expand personnel exchanges on a global scale	We will energize personnel exchanges on a global scale by stepping up various initiatives, such as a program to dispatch primarily younger and mid-career employees as overseas trainees, and the secondment of employees of overseas subsidiaries to Japan. Send 50 employees from Japan to overseas and 30 employees from overseas to Japan.
	Retain employees who reach retirement age	As a measure to foster a corporate culture in which a diverse array of human resources can succeed, we will upgrade our system for retaining employees who reach the retirement age at NTT Communications (non-consolidated) and on a Group-wide basis.
Corporate Governance		
Ensure information security	Continuously raise awareness by implementing training programs	We will reduce incidents by working to enhance awareness through information security training programs and measuring understanding, as well as by offering information security training specific to job role. Completion rate for various training programs: **100%**
	Strengthen management of processes and systems	We will strengthen management of processes for safely handling customer information, bolster vulnerability analyses of information systems and expand such analysis Group-wide.
	Implement information security surveys	We will expand information security surveys to include the entire Group.
	Obtain, maintain and manage ISMS certification	We will obtain and maintain ISMS certification by ensuring proper operations and management.

*1 Systematic guidelines regarding the operation and management of computer systems formulated by the U.K. government. The guidelines are compiled into several volumes of books. ITIL® is a registered trademark of the Office of Government Commerce (OGC) of the U.K. government.
*2 0.33 kg-CO_2 per kWh is used for the CO_2 emissions coefficient.

Previous Indices

Contributing to Society

◎ NTT Communications Group ● NTT Communications

Measures and actions	Fiscal 2010 results	Self-assessment	Fiscal 2009 results
Faithfully Serving Our Customers			
◎ **Communication service coverage**	We provided comprehensive support services to customers concerning the development of ICT environments and related operations by enabling services to be provided around the world. Provided in **159 countries**/areas	-	Provided in 159 countries/areas
● **24-hour-a-day network service**	Besides guaranteeing high quality through Service Level Agreements (SLAs), we assisted customers with a full-scale support system, including operations in 3 major global centers 24 hours a day, 365 days a year. Service uptime: **99.999%**	-	Service uptime: 99.999%
Contributing to Local Communities			
◎ **CSR activities for employee participation**	As a corporate citizen, we provided employees with opportunities to raise their awareness of contributing to society while encouraging them to participate in such activities in their local communities and regions. **10 times** (717 attendees)	-	8 times (549 attendees)

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Protecting the Environment

◎ NTT Communications Group ● NTT Communications

Measures and actions	Fiscal 2010 results	Self-assessment	Fiscal 2009 results
Environment Management			
◎ **Environmental efficiency index for CO_2 emissions*3**	**3.94** (million yen in sales per tons of CO_2 emitted)	-	3.27*4 (million yen in sales per tons of CO_2 emitted)
◎ **Environmental efficiency index for waste processing**	**1,115** (million yen in sales per tons of final disposal volume)	-	277*4 (million yen in sales per tons of final disposal volume)
◎ **Environmental efficiency index for paper usage**	**331** (million yen in sales per tons of paper used)	-	343*4 (million yen in sales per tons of paper used)
Global Warming Prevention			
◎ **Greenhouse gas emissions*3**	**319,000 tons** (Telecommunications: 298,000 tons; Offices: 21,000 tons)	Achieved	330,000 tons (Telecommunications: 306,000 tons; Offices: 24,000 tons)
Reduction of Waste			
◎ **Promoting recycling of office waste**	Recycling rate: **72.4%**	Achieved	Recycling rate: 64.6%
● **Reducing paper consumption in offices**	Paper consumed per employee (A4 equivalent): **9,314 sheets**	Achieved	Paper consumed per employee (A4 equivalent): 10,515 sheets

*3 0.378 kg-CO_2 per kWh is used for the CO_2 emissions coefficient.

*4 For NTT Communications on a non-consolidated basis.

Respecting Our Employees

◉ NTT Communications Group ● NTT Communications

Measures and actions	Fiscal 2010 results	Self-assessment	Fiscal 2009 results
Respect Diversity			
● **Promoting the hiring of people with disabilities**	We have continued to meet the statutory percentage of employees with disabilities of 1.8% by providing favorable working conditions for people with disabilities. Percentage of employees: **1.93%***5	Achieved	Percentage of employees: 2.02%
Maintaining and Improving Employee Health			
● **Mental health keeper**	Almost all managers have obtained qualification. The qualification is designed to improve managers? ability to respond to mental health risks by completing a systematic training program on mental health care management. Qualification by **1,420 employees**	Achieved	Qualification by 1,040 employees
Respecting Human Rights			
◉ **Classes on human rights**	Seeing human rights initiatives as an important activity for corporations, we promoted awareness to ensure that all employees respect individuality and human rights. **19,500 attendees**	Achieved	18,530 attendees

*5 Calculated based on conditions after the exclusion rate was amended (amended in July 2010).

Management

◉ NTT Communications Group ● NTT Communications

Measures and actions	Fiscal 2010 results	Self-assessment	Fiscal 2009 results
Compliance			
◉ **Classes on compliance at all workplaces**	Every year, classes on compliance are offered to not only employees, but also partner employees. The goals are to develop favorable worksite conditions and to foster an appreciation of the importance of corporate ethics by developing an understanding of business risks, and to reflect these business risk considerations into daily conduct. Classes were also offered at 11 Group companies in fiscal 2010. **21,506 attendees** (590 times)	Achieved	21,209 attendees (705 times)
◉ **Questionnaire on corporate ethics**	Implement questionnaires designed to step up corporate ethics activities by gauging the current status of such matters as the extent of penetration of corporate ethics initiatives within the Company and at Group companies, as well as related awareness among employees and other personnel and the openness of the corporate culture. Questionnaires were implemented at 11 Group companies in fiscal 2010. Collection rate: **98.4%**	Achieved	Collection rate: 95.6%
Risk Management			
◉ **Business risk management study group (Safety training for personnel taking overseas business trips)**	Training sessions led by experts are held for personnel taking overseas business trips. These sessions cover information that overseas travelers should be aware of and specific ways of avoiding becoming a victim of crime overseas. Through this program, we are enhancing risk management with respect to personnel taking overseas business trips. **270 attendees** (7 times)	-	53 attendees (1 time)

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CSR Report 2011

CSR Management

NTT Communications considers strengthening our corporate governance and ensuring transparent and sound management to be essential to increase our corporate value while fulfilling our public role as a provider of communications services.

Corporate governance

Corporate governance structure

We aim to strengthen corporate governance by drawing on the Board of Directors and Board of Corporate Auditors.

The Board of Directors has 15 members, one of whom is an outside director, and is chaired by the president. In principle, the Board meets once a month to make decisions and report on important management issues in compliance with laws and regulations, the Articles of Incorporation, and the Board of Directors' rules. We appoint optimal internal board candidates based on their character and professional experience, regardless of gender or nationality. The principal requirements for external directors are demonstrated supervisory experience and skills throughout their careers, from a standpoint independent of business execution, and appointment is not based on nationality or gender.

Corporate governance structure

The Board of Corporate Auditors consists of three external auditors. The auditors hold meetings of the Board of Corporate Auditors and audit the execution of directors' duties, while attending important meetings such as the Board of Directors' meetings. There is a dedicated organization and staff to facilitate efficient audit operations. The Board of Corporate Auditors closely cooperates with accounting firms and other parties through such means as periodically sharing information on audit plans and results, and is working to strengthen the audit structure.

We abolished our directors' retirement benefits program in 2006. The remuneration of internal directors was replaced with a system closely linked to business performance. The remunerations of external directors and corporate auditors are not related to business performance.

We established the Executive Council under the Board of Directors to discuss important management issues for NTT Communications and Group companies and aid in accelerating decision-making by the president on operating issues. The Executive Council met 49 times in fiscal 2010. The Market-In Promotions Council gathered 49 times during the year to deliberate and report on important individual matters. We also established committees, chaired by the senior executive vice president, to address management issues that require specialized expertise. These committees comprise the CSR Committee, Compliance Committee, Business Risk Management Committee, and Human Rights Awareness Committee. These councils and committees report regularly to the Board of Directors, which deliberates on and oversees their activities.

Internal Control System

In accordance with the new Companies Act enforced in May 2006, a basic policy related to the creation of a system of internal controls for the entire NTT Group has been formulated, and we are implementing these policies. Concurrently, as a member of the NTT Communications Group, the Board of Directors has resolved to implement all measures necessary to developing the system of

internal controls. We are also working to upgrade and expand internal controls over financial reporting in line with the requirements of the Financial Instruments and Exchange Act, which was enacted in June 2006.

Basic Approach to Internal Control System

1. NTT Communications will maintain a system of internal controls, including measures for the prevention and minimization of losses, to ensure compliance with applicable laws, appropriate risk management, and proper and efficient business operations.

2. To maintain and assess the effectiveness of the above system of internal controls, NTT Communications has established a Legal and Internal Audit Department. As a monitoring organization, this Department is responsible for regular audits and special audits of high-risk areas common to the NTT Group in keeping with the standardized auditing criteria of Nippon Telegraph and Telephone Corporation. Necessary improvements are made following assessments of the effectiveness of internal controls.

3. NTT Communications will cooperate with Nippon Telegraph and Telephone Corporation and take appropriate measures to ensure the reliability of its system of internal controls based on the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley Act) Sections 302 (disclosure controls) and 404 (internal control over financial reporting) and Japan's Financial Instruments and Exchange Law.

4. As the chief executive officer, the president will be responsible for ensuring the development and operation of the system of internal controls.

5. We will take steps needed to comply with the Nippon Telegraph and Telephone Corporation's basic policy related to the creation of a system of internal controls.

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Internal Audit

Throughout the year, we conduct standardized internal audits of our internal organizations and group companies, primarily through the Legal and Internal Audit Department. In fiscal 2011, we worked to shift from previous audits focused on compliance with various rules and other regulations, to audits that address common management issues and individual risks arising in the course of business execution.
Through these audits, we are working to improve internal controls throughout the entire NTT Communications Group by striving to reduce risk at individual organizations and Group companies, while making business improvement proposals.

CSR Committee

The NTT Communications Group has established the CSR Committee in order to promote CSR initiatives. The Committee aims to establish a structure to implement management initiatives from economic, environmental, and social perspectives. We maintain the Social Contribution Sub-committee and the Global Environmental Protection Sub-committee under the CSR Committee.
The CSR Committee meets twice a year. In fiscal 2010, representatives of 25 Group companies attended these meetings. The Committee issues CSR and activity reports, and considers and implements measures aimed at promoting CSR activities.
The Committee will continue working to foster the NTT Communications Group's CSR initiatives and awareness by holding discussions on a regular basis.

Promoting CSR

Our Business Principle (OBP)

The NTT Communications Group has formulated Our Business Principle (OBP) as a guideline for all of its business activities. As such, this guideline is shared by all employees and partner employees. OBP is a handbook that clearly states the basic principles that employees can turn to whenever they are uncertain about what constitutes correct judgment or behavior in the context of their relationships with various stakeholders. OBP thereby helps employees to remember their beginner's spirit, reflect on personal conduct and take the correct actions.

We will continue to position OBP as the fundamental guideline for CSR activities as we promote these activities going forward.

Click here for details on Our Business Principles.

CSR Leaders Meeting

Beginning in fiscal 2009, CSR leaders from individual organizations as well as Group companies came together to hold the CSR Leaders Meeting with the objective of strengthening group initiatives.

In fiscal 2010, we worked to enhance concerted Group-wide activities by bringing CSR leaders from our 13 primary Group companies and individual organizations together mainly to discuss CSR Committee proceedings and share information about each company's CSR activities.

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Compliance

Corporate Ethics Framework

For the NTT Communications Group, compliance goes well beyond merely adhering to laws and ordinances. Therefore, we are striving to establish a high level of corporate ethical standards so we can fulfill our social obligations.

For this reason, we set up the Compliance Committee in fiscal 2002 and have established lines of responsibility by appointing a director, department, and officials in all business units to oversee corporate ethics. In addition, we provide annual compliance training to all employees, including those at Group companies, and other personnel. Compliance training led by lawyers is provided to management. We also actively conduct internal awareness-raising programs, including a call for compliance slogans, for which around 7,000 entries were received in fiscal 2010.

Looking ahead, based on the NTT Group Corporate Ethics Charter, we will continue to take various initiatives to create an environment that enables everyone, from senior executives to all Group employees, to carry out their work duties with high ethical standards.

Click here for details of the NTT Group Corporate Ethics Charter.

Consultation Hotline

We established the NTT Communications Group Hotline, which Group employees in all countries can access.
The NTT Group operates an external consultation and reporting liaison desk, staffed with legal experts. These organizations are part of our commitment to a transparent corporate culture.

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Business Risk Management

Business Risk Management

We established the Business Risk Management Committee to better oversee and cope with major business risk factors capable of impacting the operation of the entire company.
In fiscal 2010, we redesigned our risk management system. We identified 25 material risk categories and listed them under our Risk Definition Report. We adopted a system of monitoring the management status of material risks through audits, while separating risk-related operations and making them more efficient.
Furthermore, we created a system to collect accurate risk information and ensure proper decision-making in response to major risks. If such events occur, we inaugurate the Disaster (Accident)/Risk Response Headquarters, which the president or a senior executive vice president may head depending on the situation.
We will continue to strengthen our systems to eliminate or minimize business risks for the entire Group.

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Information Security

Security Declaration

Because we believe that adhering to strict security management standards will lead to security improvements that will benefit our customers, we have set up the NTT Communications Security Declaration and use it as the basic guideline in conducting our business.

NTT Communications Security Declaration

Our most important mission, in addition to protecting information that is vital to our customers and providing services they know are safe, is contributing to an enhancement of our customers' security systems.
We regard security as our top priority in providing services to our customers, and we pledge to work with them to achieve optimum security systems.
We will do our utmost to ensure security in all phases of the value chain from technology and service development to establishment and operation.
Furthermore, as Internet professionals, each one of us will raise our capabilities to respond to security-related issues.

Three Resolutions

1. We regard security as our top priority in providing services to our customers, and we will do our utmost to enhance their security.

2. As an IT partner entrusted with our customers' vital information, we will work with them at all times to ensure their security.

3. Business partners and contract employees are also important supporting members of NTT Communications. We will therefore collectively strive to ensure our own security.

Click here for details on our Security Declaration and Information Protection Policy.

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Information Security Management Structure

We have established uniform information security management benchmarks and policies in Japan and abroad, in keeping with the requirements of ISO/IEC 27001, the international standard for information security management systems. We regularly monitor compliance and take any necessary corrective action as part of ongoing governance efforts to improve our security management levels.

Specifically, we established the Security Management Office under the Chief Security Officer to:
(1) Formulate rules and standards and educate all employees
(2) Plan and apply company-wide information security policies
(3) Monitor compliance with information security regulations and take any necessary corrective action
(4) Ensure unified responses to information security incidents

Specially assigned officials in each business unit manage information security.
Major initiatives in fiscal 2010:

- In order to protect information systems from Internet security threats, we performed vulnerability assessments and extended them to Group companies on an ongoing basis.
- We assisted overseas subsidiaries with the introduction of security management measures. Through these and other measures, we focused on enhancing Group-wide governance efforts to strengthen security management levels.

We will continue to monitor internal and external trends and implement all necessary information security enhancement measures.
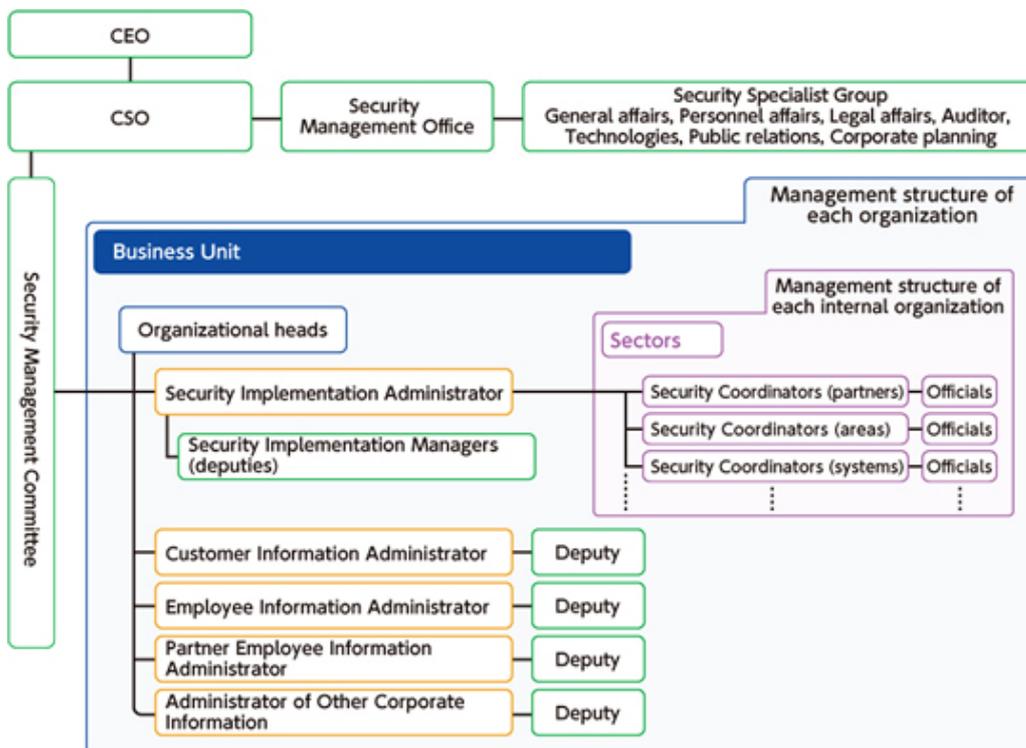
Click here for details on our Security Declaration and Information Protection Policy.

Policies to Protect Customers' Information and Privacy

We comply with the Ministry of Internal Affairs and Communications' guidelines on managing personal information. We conduct regular audits to ensure that vendors handling such information adhere strictly to our security standards with respect to handling customer information.

Third-Party Assessment and Certifications

As of March 2011, 15 Group companies, comprising 7 Group companies in Japan and 8 overseas subsidiaries, have received Information Security Management System (ISMS) certification from external organizations.
Nine companies that primarily handle personal information entrusted by customers have obtained Privacy Mark accreditation in recognition of their personal information safeguards.

CSR Report 2011

Corporate Information / Business Overview

Our Mission: "Bridge the World"

Corporate Information

Name	NTT Communications Corporation
Address	1-1-6 Uchisaiwai-cho, Chiyoda-ku, Tokyo, Japan 100-8019
Date established	July 1, 1999
Paid-in capital	211.7 billion yen (as of March 31, 2011)
Number of employees	8,150 (as of March 31, 2011)
Business	Domestic and international telecommunications services

Major organizations of which NTT Communications is a member

- Telecommunications Carriers Association (Director)
- Japan Network Information Center (JPNIC) (Trustee)
- Japan Telecommunications Engineering and Consulting Service (Board Member)
- The Association for Promotion of Public Local Information and Communication (Board Member)
- IPv6 Promotion Council (Board Member)

Main Group Companies (as of November 1, 2011)

Overseas

· Americas
NTT America, Inc.
NTT Comunicações do Brasil Participações Ltda.
NTT Multimedia Communications Laboratories, Inc.
· Europe
NTT Europe Ltd.
· Asia (excl. Japan) / Oceania
HKNet Company Ltd.
NTT Australia Pty. Ltd.
NTT Com Asia Ltd.
NTT Communications (Thailand) Co., Ltd.
NTT Communications (Philippines) Corporation
NTT Communications (Vietnam) Ltd.
NTT Korea Co., Ltd.
NTT MSC Sdn. Bhd.
NTT Singapore Pte. Ltd.
NTT Communications China Co., Ltd.
NTT Taiwan Ltd.
NTT Communications India Private Ltd.
Emerio GlobeSoft Pte. Ltd.
PT. NTT Indonesia
Shanghai NTT Telecommunications Engineering Co., Ltd.

Japan

NTT Worldwide Telecommunications Corporation
NTT Com Technology Corporation
NTT Com CHEO Corporation
NTTPC Communications, Inc.
NTT Com Solution & Engineering Corporation
Digital Forest Inc.
NTT Plala Inc.
NTT BizLink, Inc.
NTT NaviSpace Corporation
NTT World Engineering Marine Corporation
NTT Resonant Inc.
NTT SmartTrade Inc.
X-LISTING Co., Ltd.

(Among 94 consolidated subsidiaries of NTT Communications, only major subsidiaries are noted above.)

Operating Revenues

(Billion yen)
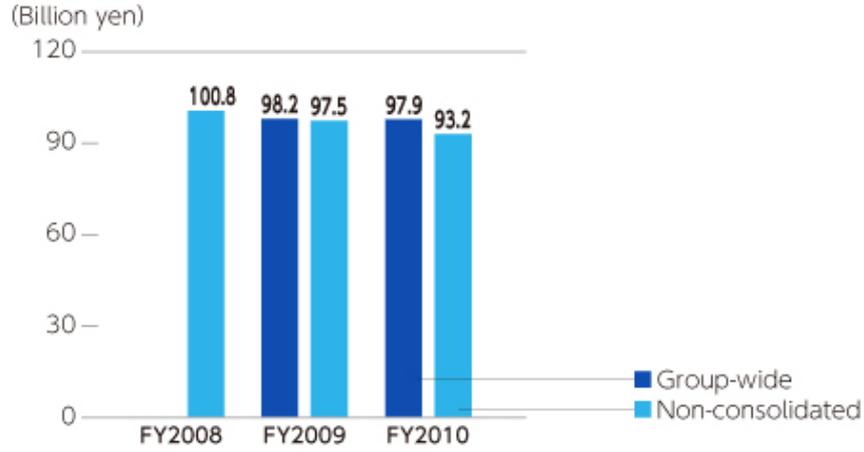
Group-wide figures have been disclosed since FY2009.

Operating Income

(Billion yen)
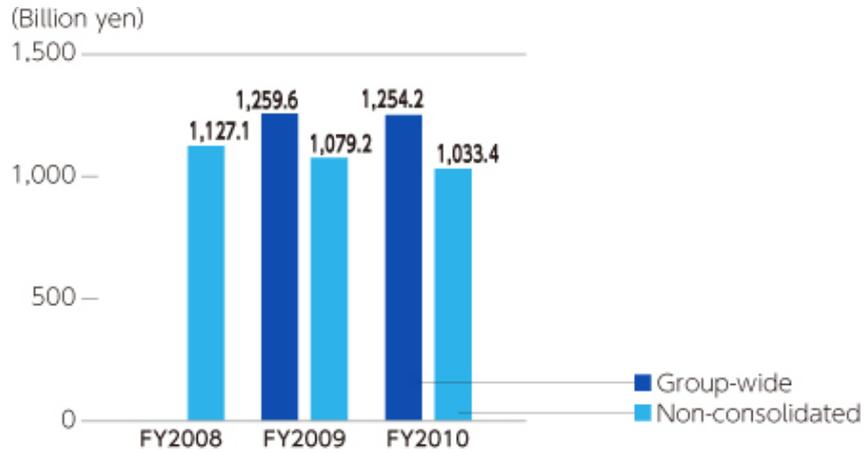
Group-wide figures have been disclosed since FY2009.

Number of Employees
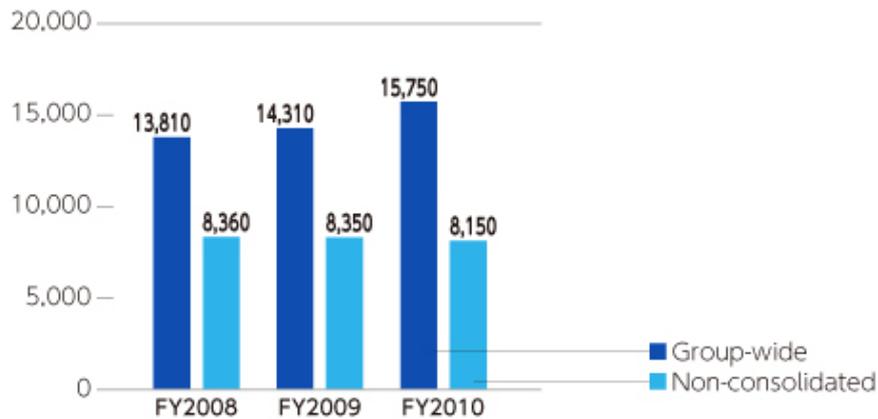
Global ICT Partner

As a true global leading player, we aim to be a partner chosen by customers throughout the world. Based on our new vision, we will continue to provide global ICT services as a partner to help customers bridge their present and future potential.

Global Networks

As one of the few global Tier 1 providers in the world, we provide the highest quality ICT services, particularly in one-stop maintenance. We provide integrated support to customers through our offices in 77 cities in 29 countries/regions.

The Cloud and Networks

The cloud is a platform in which customers can safely and reliably entrust data in an ICT environment that can be accessed securely anytime and from anywhere. Through Green ICT we are reducing environmental footprints.

Internet Business

We expand the scope of communications through application services and content services, thereby providing a safer and more comfortable lifestyle.

CSR Report 2011

Contributing to Society

Under our Basic CSR Policy, we work toward improvements in information and communication technology (ICT) and ensuring information security, and provide stable, highly reliable information and telecommunications services worldwide. Furthermore, through the provision of new business models, we contribute to the creation of a society in which all kinds of people can participate.

▶ **Maintaining Stable and Reliable Telecommunications Services**

- Capacity Increases, Redundancy, and Monitoring Around the Clock to Ensure Reliability
- Submarine Cable-Laying Technology
- Achieving Managed Quality Operations (Highly Reliable Maintenance Services)
- Technologies for Building ICT Infrastructures on a Global Scale
- Field Trial of Sensor Network Data Aggregation System
- Construction begins on Asia Submarine-cable Express, a high-reliability cable that will link the Asian region
- Keeping Networks Reliable following Disasters
- Earthquake Early Warning Service
- MobileConnect Safety Confirmation and Notification Service
- Virtual Desktop Service: Supporting business continuity in times of disaster
- Sapporo Business Continuity Center

▶ **Information Security in Telecommunication Services**

- Fighting Malware Through Public-Private Collaboration and ISP Alliances
- Enhancing ISP Security Services
- Display of the VeriSign Seal
- Enhancing Monitoring and Operation for Enterprise Network Security
- OCN Anti-DDoS Service Protects Servers and Networks

▶ Using ICT to Solve Social Issues

- Providing a safe Internet environment for children
- ".com KIDs"
- LoiLo Education Software
- Measures Aimed at Blocking Child Pornography Sites
- ".com Master" Internet Certification for ICT Personnel Development
- "CAVA" Home-Based Call Center Operations
- Biz Mail cloud computing email service for corporate customers
- "YMC-Viet Project" Field Tests Aimed at Stable Rice Production in Vietnam
- Joint Field Trial of Health Enhancement Assist Service (tentative name)
- Participating in e-Net Caravan

▶ Faithfully Serving Our Customers

- Voice of Customer Surveys
- OCN Customer Feedback - Quickly Addressing Customer Needs
- Advanced Services for Convenience and Peace of Mind
- Acquiring certification for the IT service management international standard ISO/IEC 20000-1:2005
- Renewal of COPC-2000® Quality Management Certification
- NTT Communications Acquires Latest International HDI Support Center Certification
- Evaluations of NTT Plala Educette
- NTT ComTechnology Receives "IT Special Award (for Service Management)"
- Formulation of Advertising Regulations
- Universal Design Initiatives
- Provision of Service Level Agreements (SLA)
- Quality Improvement Forum With Overseas Partner Carriers

▶ Our Relationship with Society

- Social Contribution Activity of NTT Communications
- Donations for Disaster Relief Via "E-Money Chocom" Service
- Participation in "chokotto iikoto program"
- Contributing to Society Through Websites
- MUSICO Joins UNICEF Charity Project
- Social Contribution Point System
- Group Social Contribution Activities through CSR Programs
- Taipei, Taiwan: Cleanup Campaign at Erzihping Preserve, Yangmingshan National Park
- Core Business Initiatives Addressing the Great East Japan Earthquake
- Initiatives by NTT employees to help people in areas affected by the Great East Japan Earthquake

▶ Our Relationship with Suppliers

- Promoting Fair Transactions
- CSR Procurement Policy
- Procurement Department Initiatives
- Guidelines for Green Procurement

CSR Report 2011

Maintaining Stable and Reliable Telecommunications Services

We provide a global communications network with advanced network technologies to support a sophisticated information society while our high-quality maintenance systems contribute to a society that is disaster resilient.

Network Technologies and Maintenance Systems for an Advanced Information Society

Capacity Increases, Redundancy, and Monitoring Around the Clock to Ensure Reliability

NTT Communications uses its advanced network technologies and maintenance systems to provide telecommunications services both in Japan and globally. We ensure network reliability even in disasters or other emergencies.
Specifically, we ensure telecommunications reliability and provide stable services through capacity increases and reliability enhancement of our communication routes, redundant and decentralized equipment and facilities, and monitoring around the clock throughout the entire network.

Submarine Cable-Laying Technology

NTT World Engineering Marine Corporation (NTT-WE Marine) helps install and maintain not only domestic telecommunications cables in Japan but also international telecommunications cables in the Pacific Ocean, Southeast Asia and Indian Ocean regions.
Our technology to install submarine telecommunications cables has been utilized to install submarine seismometer cables in water at depths of more than 1,000m, right from the time when NTT-WE Marine was known as "NTT Submarine Cable Engineering Center".

Cableship "Subaru"

Achieving Managed Quality Operations (Highly Reliable Maintenance Services)

In order to provide our customers with appropriate services that invite their trust and satisfaction, NTT Communications endeavors to implement process innovations and service quality improvements.
In the area of corporate data communication services, we provide a one-stop management service that centrally monitors the entire route from our network to the equipment installed at the customer's site, detects failures and notifies the customer, and implements recovery measures.
We are also making our one-stop maintenance service available 24 hours a day, 365 days a year, as well as expanding the maintenance targets for which network failure notification and recovery measures are dynamically carried out.
Previously, the NTT Communications Customer Network Service Center in Japan and the Global Network Operations Center for overseas locations were situated on different floors. Operations performed by these two service centers include establishing alternative trunk routes, duplicating or decentralizing telecommunications facilities, monitoring service status, and receiving error reports. However, in fiscal 2010 we combined our domestic and overseas operation floors. As a result, for customers who use a combination of domestic and global circuits, we are now able to provide a

one-stop service where both centers work together, literally side-by-side, to solve any problems that may arise. In April 2011, we moved a step closer to seamless operations by integrating the duties of service managers, which include overseeing operations and quality, and devising improvement plans.

When the Great East Japan Earthquake occurred on March 11, 2011, both support services responded swiftly, drawing on know-how acquired from disaster drills and previous earthquakes. Operations staff contacted customers' facilities departments as well as overseas subsidiaries of Japanese corporations.

They were able to swiftly ascertain the extent of damage and even adopt measures to bypass damaged infrastructure.

Going forward, in addition to our reception desk, we will adopt an integrated approach involving control services for business breakdowns and service manager functions.

With our hands-on seminars and certification systems, we are also continuing to develop professional human resources who, by implementing continuous-improvement and management proposals, enable us to provide our customers with the best possible maintenance services.

We are striving to provide high-quality maintenance services and powerful support to our customers' businesses by offering the following four benefits: Fast and easy operation for customers, complete one-stop operation, highly skilled technical support, and global operation that takes advantage of ICT.

Technologies for Building ICT Infrastructures on a Global Scale

To support our advanced information society, NTT Communications is providing high value-added total ICT solutions that combine networks with data centers, security, and server management. NTT Communications has taken a full range of measures to ensure that its data centers offer top-quality and highly secure and reliable services. For example, our data centers have acquired ISO 27001 (information security management system) certification and ISO 9001 (quality management) certification. They have also acquired Statement on Auditing Standards No. 18 after a successful evaluation of the compliance of NTT Communications' internal controls with the Japanese version of the Sarbanes-Oxley Act, as well as PrivacyMark accreditation that recognizes the protection of personal information.

On March 17, 2011, the scope of NTT Communications' certification for the international standard for IT Service Management (ISO/IEC20000-1:2005/JIS Q 20000-1:2007*) was extended to include the co-location service provided by the Yokohama No. 1 Data Center. We had previously acquired this certification for our hosting services and private network maintenance services.

NTT Communications has many customers in Japan and overseas who use its disaster recovery solution service. Companies use this service as part of their Business Continuity Plans. The service backs up important data on customers' servers at remote data centers and creates backup sites.

In April 2011, we launched a service at the Tokyo No. 5 Data Center that offers greater reliability and peace of mind in the event of a disaster. We introduced the service to meet the diverse ICT outsourcing needs of corporate customers. The Tokyo No. 5 Data Center is a world-class data facility that boasts advanced seismic isolation and delivers highly energy efficient and innovative green ICT. The Center received the Grand Prix Award in the Data Center section of the 5th ASP-SaaS-Cloud Consortium (ASPIC) Awards in 2011.

As of June 2011, NTT Communications had data centers in 21 countries and regions worldwide. All of these data centers implement rigorous quality control in accordance with our own unified global standards. We work hard to protect customers' systems and data, which are both valuable assets, by improving the quality of data centers and enhancing their facilities. In Asia, we have hubs in Tokyo, Hong Kong, and Singapore. We are working towards linking data centers in these countries a high-speed network in this "Asian Triangle" that will serve as a cornerstone for cloud-based services. We have commenced construction of new data centers in our buildings in Hong Kong, Singapore, and Malaysia as part of efforts to reinforce infrastructure for our data center services.

We will continue meeting the needs of customers with global business operations through the provision of meticulous support services based on our integrated global operations.

* ISO 20000 (ISO/IEC 20000-1:2005) is the international standard for IT Service Management established by the ISO based on BSI 15000, the British standard. Certification is issued by a third party organization when it deems that IT Service Management is performed in accordance with the standard's requirements.

Click here for details on Statement on Auditing Standards No. 18.

Field Trial of Sensor Network Data Aggregation System

A sensor network connects multiple sensors to obtain various data, which are when combined produce even more useful information. Sensor networks that gather meteorological, hydrographic, earthquake, and other data from a wide area including mountains and the sea hold great promise in helping create a safe and secure society through their use in disaster prediction and recovery applications.
In fiscal 2006, NTT and NTT Communications began building a sensor network that utilizes satellite communications for a project funded by the Ministry of Internal Affairs and Communications under the name "Research and Development of a Highly Efficient Frequency Utilization Technique for Communication Satellite Transponders *1." The two companies developed a "hyper-multipoint data gathering satellite communication system" that enables low-cost aggregation of various observation data streams from sensors located throughout Japan by efficient utilization of the limited bandwidths of existing satellite transponders. Field experiments using the Kiku No. 8 (Engineering Test Satellite VIII) *2 to collect various kinds of sensor data from oceangoing vessels was successful.
The field experiments' success marks a substantial advance in the concept of utilizing satellite communications to build sensor networks, which have a fundamental role to play in disaster prevention and the creation of safe and secure communities.
We will continue considering ways to tap new markets and create new businesses using satellite sensor networks.

*1. Research and Development of a Highly Efficient Frequency Utilization Technique for Communication Satellite Transponder
This research project addresses expanding needs for satellite communications, such as satellite support of sensor networks. It is also aimed at developing access control and channel spacing reduction technologies for enabling more effective frequency utilization.

*2. Kiku No. 8 (Engineering Test Satellite VIII)
Kiku No. 8 was the 8th engineering test satellite and was launched in 2006. It was developed jointly by the Japan Aerospace Exploration Agency (JAXA), National Institute of Information and Communication Technology (NICT), and NTT to test platform technologies for supporting future mobile satellite communications and positioning services.

Construction begins on Asia Submarine-cable Express, a high-reliability cable that will link the Asian region

Now, more than ever, companies advancing their global business regard a reliable communications infrastructure as the lifeblood of their business activities. In this context, they have come to expect provision of seamless network services both domestically and overseas as a matter of course. Accordingly, NTT Communications is working constantly to build environments allowing customers to access global networks with peace of mind, even after earthquakes or other disasters.
To address sharply increasing international communication traffic and strong demand for highly reliable, minimal-delay cable in Asia, in fiscal 2010 NTT Communications teamed up with Telekom Malaysia (headquartered in Malaysia), PLDT (Philippines), and StarHub (Singapore) to commence construction of Asia Submarine-cable Express (ASE), a new, high-bandwidth optical submarine cable connecting the Asian region.
The existing cable, which goes through the Bashi Channel south of Taiwan, is vulnerable to frequent earthquakes and typhoons. In order to avoid problems associated with potential damage to that cable, we have designed a route from Japan to Hong Kong, Singapore, and elsewhere that will minimize latency, and we will install optical submarine cable that maximizes reliability.

Disaster Response

Keeping Networks Reliable following Disasters

NTT Communications has adopted Disaster Policy Fundamentals for addressing disasters. Based on these policies, we work to maintain critical communications and swiftly restore communication services.
For some time, we have also conducted annual training exercises aimed at allowing swift responses to disasters.
In fiscal 2010, we conducted two such exercises. The second, done in February 2011, based on the scenario of an earthquake striking directly beneath the Tokyo Metropolitan Area, involved quick-response rescue exercises by our disaster response team. The scenario envisioned major damage to the Tokyo Metropolitan Area, to the extent that it ceased to function as a capital city. Under this scenario, we established an Initial Response Headquarters in the Kansai region of western Japan. It was assumed that the Tokyo disaster response team could not travel by normal means and thus had to commute on foot from their homes, and that the disaster response headquarters function would be taken over by the Kansai headquarters.
We also conduct annual disaster response exercises for employees. In such cases, we use "Safety Confirmation," a service offered by NTT Communications. In fiscal 2010, we introduced "Safety Confirmation Exercises" involving not only full-time employees but all other employee categories as well.
By conducting regular training exercises in these ways, we are helping raise awareness about disasters throughout the Company.

Earthquake Early Warning Service

Our Earthquake Early Warning Service delivers information such as epicenter location and magnitude, immediately following an earthquake. It is designed to reduce earthquake damage by forecasting the magnitude at the location of each customer.
The warning service was launched in July 2007 and has been adopted widely by diverse enterprises, including operators of large commercial facilities, condominiums, offices, factories, and schools. In addition to the obvious benefit of being forewarned of an impending tremor, these customers can ensure swift evacuation and confirm safety by, for example, linking the service to their internal broadcasting systems and control systems to shut down equipment such as elevators.
We have also begun offering this service to ordinary homes and individuals, providing solutions for both enhancement of safety and reduction of damage from disasters, in addition to helping corporate customers safeguard their continuity of their business.

Mobile Connect Safety Confirmation and Notification Service

We provide the MobileConnect Safety Confirmation and Notification service, which enables companies, national and local government bodies, and other organizations to check on the safety of employees and their families during disasters swiftly. The service notifies such employees of disasters by contacting them through cell-phone, landline phone, or the Web, and asks them to confirm their safety. By swiftly managing the aggregated information, administrators can effectively maintain business continuity.
This service can also be utilized during a pandemic. It allows administrators to identify infected employees, confirm whether a specific employee can report to work, and assess an employee's health condition before he/she reports to work, daily or on a continuous basis, thereby enabling administrators to easily obtain accurate updates on situations that change minute to minute.
Going forward, we will continue to offer a range of services that offer our customers peace of mind.

Virtual Desktop Service: Supporting business continuity in times of disaster

Biz Desktop Pro is a cloud-based virtual desktop service that creates a virtual PC in a cloud environment that can be accessed remotely by users anytime and from any location. The service was already in place when the Great East Japan Earthquake struck, providing customers with access to their cloud-based virtual PCs from their homes and other locations during such times as rolling blackouts and commuting difficulties. We had positive feedback from many customers who were able to continue their business operations thanks to the service. Moreover, the need to reduce electricity consumption required many people to work from home, which further heightened interest in the service and prompted numerous inquiries.

Going forward, we will continue supporting business continuity in times of emergency through a variety of ICT solutions aimed at protecting our corporate customers' information assets.

Sapporo Business Continuity Center

In June 2008, NTT Com Technology inaugurated its Sapporo Business Continuity Center, designed to constantly monitor and operate system networks, in Sapporo City, where relatively few natural disasters occur. In addition to monitoring and operating information and communications technology (ICT) systems 24 hours a day, 365 days a year, the Center handles customer inquiries, provides troubleshooting assistance, and supports business continuity planning (BCP).

Sapporo Business Continuity Center

Because ICT systems are crucial to corporate activities, data centers have been geographically dispersed as a countermeasure against potential major disasters and terrorism in Japan. However, the manned operation centers that constantly monitor and operate the ICT systems have tended to be concentrated in major metropolitan areas in order to attract a highly skilled workforce, frequently resulting in a single center monitoring dispersed systems. As corporations have come to recognize the importance of integrated BCP, the demand for dispersed operation centers for corporate systems has increased to cope with major disasters and pandemics. It was in response to this demand that we inaugurated the Sapporo Business Continuity Center.

Since then, the Center has introduced and entrenched an IT Service Management System (ITSMS). The aim of the system, which is based on ITIL®*, is to enhance service quality, increase value for customers, and boost customer satisfaction levels, while improving efficiency and productivity. As a result, in December 2009, the Center acquired ISO 20000 certification, an international standard for ITSMS. At the same time, we introduced ZABICOM, an ITIL-based open-source monitoring system allowing easy customization.

In February 2011, NTT Com Technology received the 28th Special Award (Service Management Award) from the Japan Institute of Information Technology (JIIT). This award recognizes NTT Com Technology's companywide activities and track record aimed at reforming the system integration operations of the Sapporo Business Continuity Center and raising its service quality.

We have commenced full-scale introduction of virtualization technologies and, going forward, will continue to deliver ongoing operational support services with high quality and at low cost as part of our drive to increase customer satisfaction.

* ITIL®: Systematic guidelines regarding the operation and management of computer systems formulated by the U.K. government. The guidelines are compiled into several volumes of books. ITIL® (IT Infrastructure Library) is a registered trademark of the Office of the Government Commerce (OGC) of the U.K. government.

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Information Security in Telecommunication Services

NTT Communications strives to ensure information security because we put the customer first. We are helping to bring about a network society where customers enjoy greater safety and peace of mind.

Combating Viruses and Internet Crime

Fighting Malware Through Public-Private Collaboration and ISP Alliances

Public and private sectors joined forces in December 2006 to launch an "Anti-Bot *1 Project" (Cyber Clean Center) as a countermeasure against new Internet threats. Under the project, the Ministry of Internal Affairs and Communications, the Ministry of Economy, Trade and Industry, and private Internet service providers (ISPs) such as NTT Communications are jointly pursuing a five-year plan to eradicate bot infections.

In 2005, prior to the launch of the Cyber Clean Center, the bot infection rate among broadband users in Japan (20 million users) was 2.5% (500,000 users). NTT Communications and other ISPs took the initiative to send notices to users with bot infections to make them aware of the problem and have them remove the bot. The project was extremely successful, and by its final year in 2010 had reduced the bot infection rate among broadband users (31.7 million users) to just 0.6% (190,000 users).

Japan now has one of the lowest bot infection rates in the world, and the Cyber Clean Center's program has been highly praised both in Japan and overseas. The Cyber Clean Center project was listed in the ITU-T X.1205 *2 Best Practices, and had a significant influence on a similar bot eradication program initiated in Germany.

The threat from bots has not disappeared, however. The bot infection rate in countries near Japan remains high, and Japan has come under cross-border attacks from bots in neighboring countries. Ensuring Japan's security requires security in these neighboring countries as well, and there is a growing need for bot countermeasures made in cooperation with such nations.

Further, bot infection routes and attack methods change daily, necessitating constant vigilance against attacks.

NTT Communications has been commissioned by Japan's Ministry of Internal Affairs and Communications to conduct a research study on means of avoiding infection by web-based malware *3. The knowledge gained from this research will contribute to the realization of a safe and secure Internet society.

*1. Bot: A type of computer virus or malicious program controlled remotely by an attacker to gain unauthorized access to computer terminals. Malicious programs slipped on to a network terminal might be used to distribute email spam or leak information stored on the terminal without the owner's knowledge.

*2. ITU-T X.1205: Recommendations from an organizational standpoint regarding cyber threats at various network layers. The recommendations classify security threats, and provide information on threats, weaknesses, and the most common hacker tools being used around the world.

*3. Malware: Any software designed with malicious intent, including computer viruses, worms and spyware. The spread of the Internet means programs can now be obtained via networks, putting computers at greater risk of malware infiltration. This has developed into a global social problem.

Enhancing ISP Security Services

In our role as an Internet service provider (ISP), NTT Communications must create environments allowing customers safe and secure access to the Internet. OCN offers a variety of security

services bundled into a discount package ("Anshin Select Pack"), while Plala provides a free filtering service that blocks communications originating from Winny, a file-sharing program which has become a major problem.

In fiscal 2010 we further expanded our service offerings with the release of "OCN Premium Support." With this service expert staff regularly monitor the status of user PCs, and in the event of a sudden problem provide the user with support over the phone and via remote support. The number of facilities utilizing the service reached approximately 40,000 as of the end of the fiscal 2010, and we plan to expand the service to include remote support for smartphones and a series of lectures.

During the "Anti-Bot Project," a public-private initiative conducted from December 2006 through March 2011, NTT Communications and other private ISPs worked in cooperation with Japan's Ministry of Internal Affairs and Communications, and the Ministry of Economy, Trade and Industry, to notify and provide support to numerous users with infected PCs, helping to eradicate bot viruses infecting OCN customers. As a result, the bot infection rate in Japan is extremely low compared to other countries. Even since the conclusion of the project we have continued to provide support on our own to customers with infected PCs, and plan to take an active role in any new project that may be launched in the future.

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Display of the VeriSign Seal

NTT Resonant, in a tie-up with VeriSign Japan K.K., from January 2010 began displaying the VeriSign Seal* provided by VeriSign on its goo web search results page. This seal allows users to confirm at a glance that the physical existence of the website operator has been confirmed, and that the website has passed a malware scan.

Websites displaying the VeriSign Seal on the goo web search results screen tell users at a glance that the site is safe, and not infected with malware programs such as Gumblar or other types of malicious software. VeriSign and NTT Resonant have enhanced the convenience of web search services by displaying the trustworthiness of a website in a way users can easily recognize.

* VeriSign Seal: A seal displayed on a website certifying that Verisign has confirmed the physical existence of a website operator, and that the site has passed a malware scan.

Enhancing Monitoring and Operation for Enterprise Network Security

Zero-day attacks and other network threats that users are unable to cope with themselves have increased in recent years, and more threats are targeting terminals and applications rather than servers and operating systems.
NTT Communications' Security Operation Center (SOC) monitors such new threats 24 hours a day, 365 days a year in order to protect customers' information systems and assist business continuity.

Security Operation Center

The Financial Instruments and Exchange Act, commonly known as the Japanese Sarbanes-Oxley Act or J-SOX, came into effect beginning with the fiscal year ending March 2008, and demands much more vigilant monitoring and regulation from companies to enable sound and effective operation of information systems. The SOC has adapted to these changes and is actively working to ensure the safety and security of information systems belonging to corporate customers.

In fiscal 2009, the SOC launched two information security services: The Biz Security Vulnerability

Management service, which continuously monitors IT assets to discover vulnerability early and effectively manage and control it, and the OCN Security Gateway service, which lends UTM devices inexpensively to corporations to lessen the workload and costs associated with anti-threat measures and enable them to easily implement robust and integrated security measures. In fiscal 2010, we began offering Biz Security Global Management, a managed security service allowing customers to implement seamless global security management systems that is part of our Vision 2015 strategy.

OCN Anti-DDoS Service Protects Servers and Networks

Since June 2009, NTT Communications has offered the OCN Anti-DDoS Service, which protects corporate customers' servers and networks against DDoS attack*. DDos attack is one of the methods of cyber attack via internet (See footnote).
Because it is difficult to distinguish legitimate communication traffic from illegitimate one during a DDoS attack, it is extremely challenging for customers to take effective countermeasures, even after detection of an attack. The OCN Anti-DDoS Service protects customers' systems by installing an anti-DDoS device on our OCN backbone, which will reduce illegitimate traffic to customers' servers and routers.

* Distributed Denial of Service (DDoS) attack: This kind of attack renders a service unavailable by sending a massive number of communication requests to the target server or network from multiple computers connected to the Internet, causing the load level to exceed the communication bandwidth or the server's processing capacity.

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Using ICT to Solve Social Issues

NTT Communications provides new business models driven by information and communication technology (ICT) services and lifestyle proposals. In this manner, we are contributing to the creation of a fully inclusive society open to all kinds of people.

Sound Child Development

Providing a safe Internet environment for children

In May 2009, NTT Communications' Open Computer Network (OCN) launched "OCN Kids Care." By blocking access to harmful Internet sites, this service for parents and children provides greater peace of mind and promotes proper PC usage among children.

Customers using OCN Kids Care can purchase a dedicated application to install in computers used by children. The application denies access to Internet sites with potentially harmful information. In addition to allowing parents to block activation of software that they don't want their children to use, parents can

Kids-goo

prevent excessive use of computers and the Internet by specifying a time band in which their children can use their computers, or the daily maximum number of hours of computer usage. If a child attempts to access a website with inappropriate content, a warning email is sent to the mobile phone of that child's guardian. The service provides further functions that enable parents and guardians to keep track of their children's computer use. It does this by periodically saving screen shots of the computer screen the child is looking at, and forwarding these screen shots to parents or guardians via mobile phone or the Internet.

NTT Resonant offers "Kids-goo," a child-oriented website portal that is safe for children to use. Using a proprietary filter and the same huge search database as the "goo" search engine, Kids-goo shows only web pages thought to be safe for children. As a useful search service that helps children learn while using a safe Internet environment, Kids-goo is widely used in elementary school Internet classes.

".com KIDs"

NTT Com CHEO offers a program called ".com KIDs" to help children improve their academic abilities and deepen the connection to their local communities, utilizing after-school hours and non-school days.

In this program, children use barcodes to print out study sheets. This allows them to learn Japanese, arithmetic, and Chinese characters from materials matching their level of proficiency. The program can also be used as a learning tool or communication tool since it can be operated in community schools or other groups attended by students of varying school grades, as well as by community volunteers.

".com KIDs"

LoiLo Education Software

In response to the desire of educators to nurture the ability of children to be creative and expressive, NTT Com CHEO became a distributor of "LoiLo Education" video editing software in February 2010, in order to support the efforts of educators to create a new learning approach that utilizes video.

"LoiLo Education" software was created under the supervision of the NHK Educational Corporation and is equipped with an open and user-friendly interface that makes it easy for teachers to explain subjects without interfering with the independent thought processes of the children receiving the instructions. The software can quickly and easily be incorporated into classroom lessons.

Several schools have already installed this software; some examples of its use include elementary school students making advertising videos for tourist spots they visited on their school trip, and junior high school students creating a yearbook prior to graduation. Licenses for LoiLo Education are sold to education boards, elementary schools, and other educational organizations. We plan to exhibit this video editing software at educational conferences and events in order to steadily increase its adoption in schools.

Measures Aimed at Blocking Child Pornography Sites

Blocking child pornography on the Internet is an important issue that must be addressed in order to protect the rights of children and ensure the provision of a safe Internet environment. It is an issue that has been examined from a variety of perspectives. In July 2010, the ministerial anti-crime conference of the Japanese government released its policy on a national campaign against child pornography. The policy called for Japanese Internet service providers to implement measures to block access to child pornography websites, and for associated efforts on the part of government agencies, during fiscal 2010.

In March 2011, the NTT Communications Group joined other ISPs, search engine service providers, filtering service providers, and related businesses to form the Internet Content Safety Association (ICSA). In April 2011, members of the ICSA began compiling information on websites they will block access to in order to deny access to child pornography images and providing other member providers with child pornography website address lists.

The NTT Communications Group's "goo," "plala," and "OCN" services have access restrictions based on child pornography website address lists provided by the ICSA.

Creating a Fully Inclusive society

".com Master" Internet Certification for ICT Personnel Development

Rapid expansion of the Internet and dramatic advancements in ICT have created many more situations, both in the business world and the lives of individuals, demanding standards that enable objective evaluation of ICT skills. The ".com Master" (Dot Com Master) Internet certification program is an ICT skills certification program operated by NTT Communications since 2001. The program assesses the ability of human resources to apply their ICT skills in society, assigning four grades-Basic, Single Star, Double Star and Triple Star.

Approximately 293,000 people had taken examinations by March 2011 with around 100,000 people passing. The certification is being used to provide evidence of ICT skills in job-hunting and business settings. The program has been incorporated into corporate ICT personnel development systems and ICT learning curriculums of universities and vocational training schools. The fiscal 2011 goal is for 25,000 people to take the examinations.

NTT Com CHEO operates "CAVA" (.com Advisor and Valuable Agent), an IT support business run by personnel certified with a .com Master Single Star grade or higher. The system serves as a bridge between participants' newly acquired skills and practical application in work.

"CAVA" Home-Based Call Center Operations

NTT Com CHEO holds training courses and certification examinations on computer and Internet settings and operation. It contracts certified individuals with a high level of ICT skills as "CAVA operators," who work as home-based ISP call center staff. Currently, NTT Com CHEO is working to expand nationwide training opportunities through the introduction of home-based training via the Internet. As of the end of fiscal 2010, there were approximately 2,000 CAVA operators. This system of home-based operators utilizes untapped human resources such as women who have had to stop employment due to child raising or caring for other family members, as well as retired senior citizens. In fiscal 2010, we implemented measures to help single mothers become CAVA operators, thus enabling them to achieve a balance between work and childcare. We also extended eligibility to include single fathers.

Operator-senior citizen

Operator-housewife

Operator-Individual business owner

We were commissioned by the Community Employment Creation Council of Nago City in Okinawa to foster human resources for ICT-related industries under an employment promotion project sponsored by the Ministry of Health, Labour and Welfare. Since September 2009, we have supported locals seeking employment by offering training in ICT skills and opportunities to acquire qualifications, as well as by employing individuals as home-based CAVA operators. Through such activities, we aim to expand employment opportunities in local communities and contribute to community revitalization.

Going forward, we will continue meeting the employment needs of a diverse range of people by providing opportunities for individuals to work without location or time constraints.

Features of CAVA

(1) There are two types of CAVA operations. The first is a home-based telephone support service to provide support for problems such as Internet connection settings. The second is a visiting setup support operation in which the employee travels to a customer's home to provide support. The two types can also be combined.

(2) We offer a wide range of employment opportunities to people wishing to work from home, and are helping to expand employment opportunities not only for housewives who must care for children or other family members, but also for single parents and senior citizens.

(3) We carry out CAVA staff recruitment and training every month. By offering Internet-based CAVA training that can be undertaken (remotely) from home, we are making this training available throughout Japan.

(4) CAVA operators working at home have a tendency to feel isolated. To address this, we use social networking as a medium that enables our CAVA operators to exchange information and get to know one another.

Perspectives of CAVA Staff

Mari Senba

I learned about CAVA when I was a full-time mother and housewife and decided to acquire ".com Master" certification because I felt it could lead to a job. The biggest benefits of CAVA are the fact that I can work from home and have complete control over when and how many hours I work. A woman's lifestyle changes according to her family situation and the location and hours she can work also change as a result. However CAVA enables us to continue working. Since I probably could not have worked full time while raising my children, I am really grateful for the CAVA system.

Hiroaki Tanaka

After retiring from my company, I acquired PC-related certification as I am interested in computers. I never dreamed I would be learning new skills at the age of 50, but I studied hard and was able to acquire ".com Master" certification. I think ".com Master" certification ensures that the applicant understands the basics of the Internet thoroughly, and I am grateful because, for me, it transformed a hobby into a job. Also, I have always been an avid motorcycle rider and now I can ride my bike when visiting customers to provide support. It would be great if I could keep working as a supporter like this for the rest of my life.

Masafumi Okada

I moved to Okinawa from a large city to recover from an illness. The CAVA system is really helpful to me because it allows me to take both my health and other commitments into consideration when scheduling work. Furthermore, because the system has no restrictions on work location or hours, it offers great benefits in local areas where there are few employment opportunities. I find it really exciting that I am connected to customers all over Japan through my CAVA work, even though I live in Okinawa.

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Biz Mail cloud computing email service for corporate customers

In this era of the globalization of economic activities and accelerating changes in the business environment, corporate system administrators and users are increasingly demanding system capabilities that allow them to store emails on a network. This is to enable them to access their emails from anywhere and also to ensure protection of their emails from accidental loss.
In October 2009, NTT Communications began offering Biz Mail, a new cloud computing email service that provides an ICT environment in which users can use email functions anytime, anywhere, with ease and security. Biz Mail offers security functions equivalent to those of proprietary email systems combined with operation and maintenance services that meet Japanese standards of quality and offer corporate system administrators a sense of security about outsourcing email functions. As a result, Biz Mail has been adopted by numerous corporate customers.
Going forward, we will expand our offerings to include frequently requested services, such as mailing lists, smartphone compatibility, and API links.

"YMC-Viet Project" Field Tests Aimed at Stable Rice Production in Vietnam

NTT Communications, the NPO Pangaea, and the Institute for HyperNetwork Society have held field tests of an international telecommunications system for the "YMC-Viet Project," which is part

of the Ubiquitous Alliance Project *1, an initiative of Japan's Ministry of Internal Affairs and Communications. The field tests, which began in Vietnam on February 16, 2011, were for an agricultural assistance system that makes use of youth-mediated communication (YMC).

The project targets agricultural communities with a relatively low rate of adult literacy. Using the YMC system *2, youth with a high level of literacy make use of mobile phones, the Internet, and automatic translation functions provided by Pangaea to mediate communication between agricultural specialists in Japan and the farming generation of their parents in Vietnam. The overall aim of the project is to provide a useful framework for raising the productivity of farming in that country.

For the field tests, youth from households engaged in rice cultivation used terminals at an ICT center built in Vinh Long Province to input replies to queries concerning matters such as temperature, humidity, and the status of rice cultivation. A translation system then translated the content from Vietnamese to English, and then into Japanese. Agricultural specialists in Japan responded by inputting advice based on the provided data regarding the status of rice cultivation. To aid the translation process, individuals called "bridgers" provide online support by editing the final Vietnamese text so that it is easy for young Vietnamese to understand. It is hoped that in addition to higher rice production in Vietnam, this system will also lead to stable and high-quality rice production.

The field tests ended on March 31, 2011. However, the project team aims to expand the system further. While continued use of this system in Vinh Long Province is expected to see it become a familiar practice, it will be introduced into other districts. The project participants are currently examining the possibility of applying this system to other fields besides agriculture.

*1 Ubiquitous Alliance Project sponsored by the Ministry of Internal Affairs and Communications
The aim of this project is to accelerate international deployment of technologies in the three priority areas of digital broadcasting, next-generation IP networking, and wireless technologies, as well as to lead the world in conducting field tests in new areas that make use of Japan's advanced ICT infrastructure. By conducting trials of technological and systemic issues, the project seeks to reinforce the international competitiveness of Japan's ICT industry and strengthen the potential for growth using ICT.

*2 Youth-mediated communication (YMC) system
This system provides service grid-type agricultural assistance between countries based on the "Youth-mediated Communication Model" established by the NPO Pangaea, in which children help mediate communication on agricultural-related matters between Japanese experts and their parents. In order to provide agricultural information (expertise), the system employs a service grid platform to link scattered languages and knowledge that takes into account problems associated with multiple languages, which is pronounced in developing countries, and the characteristics of children, who are the direct users of the system.

Joint Field Trial of Health Enhancement Assist Service (tentative name)

In February 2011, NTT Communications, NTT Resonant Inc., and foo.log Inc. began a field trial of a jointly developed Health Enhancement Assist Service. The service helps with health management and enhancement underpinned by the concept of cloud computing-based storage and analysis of users' "life logs" (data on daily life) to provide services that will make their lives more enjoyable, convenient, and comfortable.

The trial was held for the world's first service that uses smartphones and computers to automatically estimate calorie consumption based on photos of meals, as well as estimate how many calories are burned while walking each day using the GPS location function and acceleration sensors in the user's smartphone. Various other functions provided by the service include comparisons with data from other users of the service, 5,000 recipes created under the supervision of professionals, and as many as 180 exercise videos.

Members of the general public have been provided with smartphone applications for the field trial, and various aspects of the service, including its content and user-friendliness, are examined to ascertain if there are any problem areas that need fixing. So far, 60,000 people have participated in the trial and have downloaded more than 100,000 applications. Encouraging feedback includes the service's usefulness for dieting and maintaining good health, and the positive effect that having to record everything eaten has on keeping down one's weight. Going forward, the service will be

optimized based on an evaluation of its practicality and effectiveness. The aim is to make the service commercially available in the second half of fiscal 2011, once an appropriate business model has been established.

Participation in Public Policy Programs

Participating in e-Net Caravan

Private telecommunications organizations, the Ministry of Internal Affairs and Communications, and the Ministry of Education, Culture, Sport, Science, and Technology formed e-Net Caravan, an initiative providing education about safe Internet usage targeting children, students, parents and teachers. NTT Communications is actively involved, dispatching teaching staff, in principle, free of charge

CSR Report 2011

Faithfully Serving Our Customers

We endeavor to increase customer satisfaction through rapid and sincere responses to customer feedback, and are working to create a system that guarantees high-quality service.

Improving Customer Satisfaction

Voice of Customer Surveys

NTT Communications carries out "voice of customer" surveys and uses findings to enhance the quality of services and make process improvements relating to the provision of customer service. In fiscal 2010, we received responses from around 1,500 companies. The results of this latest survey showed higher ratings for all areas compared with the previous year. With the aim of further enhancing customer satisfaction, we are formulating a fiscal 2011 improvement action plan based on customer requests.

We received many comments on "expectations concerning cloud computing" and "requests concerning global networks." In response, we released a new version of "Arcstar Universal One." In the future, we will offer customers worldwide support for broadening their businesses globally by expanding our top-quality overseas networks and data centers, as well as by strengthening collaboration with overseas companies and relationships with partner carriers.

Going forward, we will continue efforts aimed at resolving issues that have come to light as a result of customer feedback and requests. To this end, we will undertake a review as part of a company-wide project.

Examples of Improvements in Fiscal 2010 (March 2011)

- Shortening of the delivery schedule for launching the Group-VPN (F) service
- Establishment of improvement aims and benchmarks, including failure reporting, with overseas partner carriers.

OCN Customer Feedback - Quickly Addressing Customer Needs

Since 2006, NTT Communications has operated "Action! OCN," an initiative that enables prompt responses to requests made directly by customers of OCN personal services. Under this initiative, we have made improvements to ensure that our customers remain satisfied with the services we provide. On April 19, 2011, we changed the name of the website to OCN Customer Feedback to better convey to customers the nature of the site. We also took the opportunity to upgrade the entire site.

We make use of the website to announce details of improvements made based on customer feedback and requests. Following the upgrade, the improvements have been made based on the themes of making the site more accessible, convenient and user-friendly. For example, the website now offers samples of postings, options for reply email addresses, and details on initiatives. The addition of a FAQ page containing information on faults, procedures, and the various services available is a handy way for customers to get answers when they experience a problem.

OCN Customer Feedback is not used merely to make improvements to OCN. Recognizing that the thoughts of each individual customer concerning the Internet must be shared as the thoughts of OCN, our aim is for the website to play a role in creating a fulfilling Internet experience together with our customers.

Advanced Services for Convenience and Peace of Mind

NTT Communications seeks to improve customer satisfaction through advanced services that provide convenience and peace of mind.

For greater convenience and peace of mind when using email services, "My Address Plus" allows customers to select a generic JP domain of their choice (xxx.jp) for email addresses and blog URLs, to restrict incoming messages to only those from designated addresses, and also to use separate addresses for different purposes.

With OCN premium support, specialist staff make regular inspections of users' computers to ensure they are in top condition. Users also receive telephone and remote support should they experience a sudden computer-related problem.

"OCN IPv6" was one of the world's first IPv6 access services for general users. As a solution to the exhaustion of IPv4 addresses, the need for IPv6 technology is growing. NTT Communications will continue to develop and deliver cutting-edge Internet services in order to provide even greater customer satisfaction.

In fiscal 2010, we launched "OCN Mail Concierge," which sends e-mails containing rain warnings, railway operation updates, and other information to customers' mobile phones and smartphones.

We also launched "Biz Hosting Mail & Web Economy," a hosting service that delivers one of the industry's highest levels of cost performance.

We will continue improving services according to customer needs in order to attract an even wider customer base.

Acquiring certification for the IT service management international standard ISO/IEC 20000-1:2005

NTT Communications received certification under the ISO/IEC 20000-1:2005 international certification standard for IT service management in May 2010. The certification is for the Company's Biz Hosting Enterprise which is a high-quality cloud computing hosting service that uses virtualization technologies and AGILIT Hosting that specializes in hosting services for core systems and basic information infrastructure.

The ISO/IEC 20000-1:2005 standard, issued in 2005 based on the U.K.'s BS 15000 standard for the IT management field, defines a system operation management procedure in 13 processes and incorporates the concept of the PDCA cycle.

In addition to the continuation of existing certification, we expanded the scope of certification for our colocation service in March 2011 to include a large-scale private network maintenance service, hosting service, and colocation service.

In future, we will continue to acquire further certification, and through the establishment and improvement of IT service management systems provide our customers with high-quality IT services to ensure an enhanced feeling of security when using them.

Renewal of COPC-2000® Quality Management Certification

In August 2009, NTT Communications renewed obtained version 4.2 of the COPC-2000®* standard for contact center performance management. In fiscal 2010, our certification was upgraded to version 4.3. We will continue targeting stable operation of the COPC (Customer Operations Performance Center) management method.

NTT Communications' Service Desk offers a Super Help Desk Service, which provides corporate end-users and system managers with answers to their ICT-related inquiries in both Japanese and English, 24 hours a day, 365 days of the year.

We will continue to aim to achieve clearer visualization and improvement processes for services offered and provide the best service desk services available for our customers to ensure a greater feeling of safety when using ICT services. At the same time, we will also take new steps, including extending the scope of certification to new teams.

* COPC-2000® is a trademark or registered trademark of COPC Inc. (headquartered in New York) in the United States and other countries.

NTT Communications Acquires Latest International HDI Support Center Certification

In November 2004, NTT Communications' Sendai OCN Service Center first acquired HDI Support Center Certification from the Help Desk Institute (HDI), and in January 2009, the Center acquired certification under version 4.1, the latest standard. HDI is an international organization for the support service industry. Its international HDI Support Center Certification program enables evaluation of support center quality and performance in comparison with ideal conditions under international certification standards for support service businesses.

In January 2011, we acquired the latest standard, which requires an even higher level of service quality than the previous standard. For example, new escalation standards have been added through strengthened coordination with the Information Technology Infrastructure Library (ITIL)®*, and evaluations of performance and quality have become even stricter.

Initiatives taken in fiscal 2010 include establishing an OED (OCN Escalation Desk) team in the Sendai OCN Service Center. The resulting integrated management of complaints has contributed to the eradication of red-tape in complaint resolutions, a decrease in complaints, and a higher level of customer satisfaction. We also established a "10-second end-of-call questionnaire." As a result of passing on to the operator the details of the customer's evaluation of the service just received, there has been an improvement in the quality of the service provided by the center as a whole.

In future, we will work to improve support service quality from the customer's perspective and create centers that leave customers with a positive impression.

* ITIL: A framework for best practice IT service management devised by the U.K. government consisting of multiple volumes. ITIL® (IT Infrastructure Library) is a registered trademark of the Office of Government Commerce (OGC).

Evaluations of NTT Plala Educette

In November 2009, the Net Barrier Basic filtering service we provide for NTT Plala, our Internet access service for individuals, and Business Plala, our Internet access service for corporate customers, received approval as a recommended product from the All Japan Parents and Teachers Association. In fiscal 2010, the Net Barrier Basic filtering service received the same approval for the second straight year.

We received approval from the All Japan Parents and Teachers Association for Educette, our Internet access service for schools, as a recommended product. This helped raise the Educette brand value and the trust and sense of security felt by our customers toward this service. As of the end of March 2011, NTT Communications was the only ISP that provided free Web filtering for this kind of service. The uniqueness of Educette has also led to higher customer satisfaction.

We will continue protecting children from harmful websites while acknowledging the social situation and the needs of customers, as we endeavor to improve our services so that we can provide and even safer Internet environment for children.

NTT ComTechnology Receives "IT Special Award (for Service Management)"

NTT ComTechnology Corporation received the "IT Special Award (for Service Management)" in the fiscal 2010 IT Awards hosted by the Japan Institute of Information Technology.

The award was given in recognition of initiatives adopted by NTT ComTechnology to raise the quality of the services it provides, particularly the improvement in IT service management at the Sapporo Business Continuity Center owing to the introduction of ISO 20000 certification.

"IT Special Award"

The IT awards hosted by the Japan Institute of Information Technology are presented to companies and local authorities in recognition of outstanding achievements made as a result of noteworthy efforts in "IT-based corporate management innovation." The Information Technology Awards include the "IT General Award," "IT Business Award," "IT Management Award," and "IT Special Award." NTT

ComTechnology's efforts were recognized by the Japan Institute of Information Technology through the fiscal 2010 "IT Special Award (for service management)."

Responsible Public Relations and Advertising

Formulation of Advertising Regulations

Sophistication and diversification of services and pricing schedules in recent years mean advertising needs to be made easier to understand.
To give customers peace of mind when selecting and using services, NTT Communications has been striving to ensure reliability of advertising in keeping with voluntary standards and guidelines for telecommunications advertising established by the Council for the Promotion of Telecommunication Service Improvement. In November 2008, we formulated and commenced enforcement of regulations on advertising.
Specifically, the regulations define materials requiring examination, designate personnel responsible for carrying out examinations and clarify the examination process. The examination framework and processes have thus been strengthened.
As well as complying with laws such as the Act Against Unjustifiable Premiums and Misleading Representations, NTT Communications will make further efforts to consider the customer's standpoint when engaging in advertising and other public relations and promotional activity.

Universal Design Initiatives

NTT Communications is pursuing ongoing initiatives to optimize its official websites.
From fiscal 2007 through fiscal 2009, NTT Communications overhauled its guidelines for domestic and global websites to comply with the World Wide Web Consortium (W3C) Web Contents Accessibility Guidelines (WCAG2.0).
In fiscal 2010, we completed the revision of our website development and operation guidelines to bring them into line with "JIS X 8341-3:2010," which had been revised to ensure consistency with the WCAG2.0 international standards.
In fiscal 2011, we began developing guidelines concerning the usage and introduction of social media. Additional effort will be made to enforce these regulations to ensure that our websites are easily accessible to all users.

Responsibility for Delivering High-Quality Services

Provision of Service Level Agreements (SLA)

In Service Level Agreements (SLA), a quality standard is set for the services we provide. Then, in case the standard is not satisfied, a discounted fee will be applied.
In enterprise network services such as e-VLAN, Arcstar IP-VPN and GIGASTREAM, NTT Communications applies the highest level of SLAs in the industry. We thereby guarantee continual provision of top-quality services.
In addition, we applied Service Level Agreements (SLAs) to the cloud VPN service "Arcstar Universal One" covering network operating rate, circuit operating rate, fault repair time, network latency, fault notification time, guaranteed bandwidth, and network launch latency. We deliver top-quality services to customers based on clearly identified criteria for each of these seven items.
With an aim to further improving customer satisfaction, we will continuously examine and revise (if necessary) parameters and criteria within SLA.

Quality Improvement Forum With Overseas Partner Carriers

NTT Communications holds an annual Arcstar Carrier Forum (ACF) aimed at further improving the quality of its network services at a time when more and more demands are made of customers to ensure business continuity.

The Arcstar Carrier Forum is a conference we have convened annually together with partner carriers from around the world since 2000 for the purpose of improving quality in the operation and delivery of international network services. Until now, the focus

Arcstar Carrier Forum

has been on expanding discussions for initiatives aimed at improving the quality of essential infrastructure, such as ways to deal with service failures and construction issues, infrastructure design and construction processes to prevent issues arising, and operational support systems that enable rapid issue analysis and resolutions.

Through initiatives such as the ACF, we improved the quality of international data communication service operations in other countries as well, while also amassing considerable know-how. Going forward, we will continue improving the overall quality of our global network, including by expanding activities into more countries.

CSR Report 2011

Our Relationship with Society

Under our Social Action Principles, we operate in harmony with society and make a variety of contributions to international and local communities as a good corporate citizen.

Basic Approach to Social Contribution

Social Contribution Activity of NTT Communications

NTT Communications implements a wide range of social contribution activities through which we are contributing to the enrichment of society. The spheres of activity are diverse and include international cooperation; environmental conservation; health, medical care and welfare; regional development.

Social Action Principles

Sustainability
We conduct lean but lasting activities over the long term.
Efficiency
We engage in cost-effective activities for ease of continuity.
Due Diligence
We carefully assess whether prospective donations will truly benefit society.
Global Perspective
We contribute both to Japan and to the international community.
Skills
We utilize services and employee abilities developed through information distribution for the benefit of society.

Serving Local and International Communities

Donations for Disaster Relief Via "E-Money Chocom" Service

"E-Money Chocom" is an electronic money service enabling even the smallest of payments to be made online.
We accept donations related to disaster events via the "E-Money Chocom" service, and funds received are delivered to victims through the Mainichi Welfare Foundation (Tokyo).

Donations for Disaster Relief (Fiscal 2010)

Period	Details	Amount
From April 19, 2010 to May 20, 2010	Relief for Victims of Great Sichuan Earthquake	¥35,100
From December 1, 2010 to December 25, 2010	Year-End Mutual Aid Fund	¥27,900
From March 14, 2011	Great East Japan Earthquake Victim Support Fund	¥9,900,700? (September 30, 2011)

Participation in "chokotto iikoto program"

NTT NaviSpace Corporation, which operates the "Potora" interactive point earning and ranking information website, has been participating in the "chokotto iikoto program" run by Rakuten Bank, Ltd. (formerly known as eBANK Corporation) since October 2008. Registered Potora users include many housewives in their 30s or 40s who have few opportunities to donate through corporations or other organizations. One of Potora's objectives is therefore to assist social contributions by housewives.
Under the "chokotto iikoto program," funds are automatically paid to designated charity organizations whenever the Rakuten payment system is used. As a participant in this program,

Breakdown of Donations

Organization	Amount
Japan Guide Dog Association	¥38,348
Japan Marrow Donor Program	¥38,348
Plan Japan	¥38,348
Japan Cancer Society	¥38,348
Medecins Sans Frontieres (MSF) Japan	¥38,348
Total	¥191,740

NTT NaviSpace donates funds (equivalent to 10 yen for every point) each time Potora users change points into cash using Rakuten, twice yearly in even amounts to the Japan Guide Dog Association, the Japan Marrow Donor Program, Plan Japan, the Japan Cancer Society, and Medecins Sans Frontieres Japan.
NTT NaviSpace assumes responsibility for the donated funds, allowing Potora users to participate in the program simply by exchanging their points into cash. In fiscal 2010, we accepted donated funds totaling ¥191,740, which we donated on May 31, 2010 and March 31, 2011. We will continue participating in this project throughout fiscal 2011.

Contributing to Society Through Websites

NTT Resonant Inc. undertakes various social contribution activities through the "goo" Internet portal. In fiscal 2010, we set up "goo Pink Label" and supported the Pink Ribbon Campaign, aimed at increasing awareness about breast cancer, which has attracted increasing attention in recent years.
"Goo Pink Label" is a Web search engine service. In fiscal 2010, we donated ¥100,000—a portion of revenue from the service—to the Japan Fund for Breast Cancer, a fund operated by the Japan Cancer Society to help in the fight against breast cancer. During the year, more people than ever accessed this service thanks to our efforts to improve it. These included creating Pink Ribbon and weblog sections on the "goo" main website, upgrading content contained in the campaign page, and adding a "goo Pink Label" mobile application.

Pink Ribbon Campaign 2011

In fiscal 2010, we received responses from 32,000 people to the annual survey on breast cancer awareness, a record-high number. The responses indicated that although awareness of the Pink Ribbon campaign and breast cancer has become well established and interest is increasing, few people conduct self-examinations—a situation unchanged from the previous year. In future, it will become an important issue for the campaign to determine the kinds of initiatives that will connect activities to self examinations.

MUSICO Joins UNICEF Charity Project

NTT Communications' online music store, Music Ocean (MUSICO), participates in the HAPPY BIRTHDAY DOWNLOAD for children, a charity project organized by the Japan Committee for UNICEF through which musicians, recording companies, and music retailers donate money to save the lives of babies around the world.
When MUSICO users download a recording of Happy Birthday to You as a ringtone for their

mobile phones, a portion of the proceeds is donated to UNICEF activities for saving the lives of babies.
So far, we have donated ¥307,800. In addition to contributing to UNICEF itself, this constitutes a model case for contributing to international society via the distribution of music. The fact that we were able to have an impact on society is a great achievement.

Social Contribution Point System

Because we want to help build a corporation and workforce on which society can rely, we support and promote the participation of our employees in social contribution activities. To encourage each employee to become active in at least one volunteer activity, we introduced the Social Contribution Point System in fiscal 2008. In this system, Group and partner company regular and temporary employees submit reports on the social contribution and environmental conservation activities they undertook voluntarily. These activities are then converted into points, the monetary value of which the Company donates to selected NPOs.
Furthermore, once a year we publicly acknowledge individuals and organizations depending on the type of activities conducted.
In future, we will continue to support regular and temporary employees from Group and partner companies who are working to resolve social issues.

Group Social Contribution Activities through CSR Programs

The NTT Communications Group runs CSR programs that welcome participation from employees and their families.
Major activities include the Chichibu Rice Terrace Revitalization Project, Morinosaisei.Com (Forest Revitalization), and Mt. Fuji cleanup Project. In addition to increasing environmental conservation awareness, these experiences provide opportunities for exchanges with regional areas and contributions to society.

Taipei, Taiwan: Cleanup Campaign at Erzihping Preserve, Yangmingshan National Park

During the year, NTT Taiwan hosted a cleanup campaign at the Yangmingshan National Park in Taipei, Taiwan.
The cleanup was held in wetlands in a protected area called Erzihping, located within the Yangmingshan National Park. Numerous foreign plant species had sprung up in the scenic ponds that make up the wetlands. By cleaning up the ponds and removing such foreign species, we were able to protect the native ecosystem. This year, employees and their families, for a total of 45 people, braved the heavy rain to help remove the foreign plant species.

Cleanup campaign

Comments from the Organizer

Ms. Peiszu Lee

I visited Japan for a six-month period as part of a training program. While in Japan, I participated in a tree-planting program, one of the CSR activities organized by the Company's General Affairs Department. I felt that environmental protection initiatives are wonderful, and hoped to pursue similar activities after returning to Taiwan.

The Erzihping cleanup campaign enabled me to realize that hope, and made me feel very happy.

The weather on the day was bad, with strong winds and heavy rain. Nevertheless, we employees worked our hearts out cleaning the ponds, achieving a very good result at the end.

I would like to continue pursuing similar activities in the future.

Activities Related to the Great East Japan Earthquake

The NTT Communications Group strove to fulfill its social mission through various initiatives immediately following the Great East Japan Earthquake.

Seeking to help achieve a speedy recovery, we provided support in a number of ways. To ensure that our response to this natural disaster does not end with temporary measures, we will continue with sustained efforts in the future.

Core Business Initiatives Addressing the Great East Japan Earthquake

Information Transmission

Information is of utmost importance, not only for victims themselves but also to help people within and outside of affected areas involved in recovery and restoration efforts.

Immediately after the Great East Japan Earthquake, the NTT Communications Group delivered information in a variety of ways through dedicated portal sites.

- From March 12, 2011, OCN established a page on its website to provide information related to the earthquake. Included in this page is information about government disaster countermeasures, information for victims, information on power outages and the nuclear power plant accident, earthquake and tsunami updates, and information aimed at gathering support for victims.
- Within one hour of the disaster, NTT Resonant set up a dedicated Great East Japan Earthquake page on its "goo" website to provide information about the disaster and nuclear accident and other information for victims. From March 18 to June 10, it also had a section of the site called "goo Messages from Evacuation Centers." This service allowed victims without access to Disaster Emergency Message Dial service to leave messages for families and friends with employees of NTT East and others. Those messages were then posted on the site, enabling intended recipients to search for them. Since March 24, we have also provided a beta version of a nationwide map showing current radiation levels.

Services Provided Free of Charge

We also provided various services free of charge, with the aims of ensuring that disaster victims had proper means of communication and of offering assistance to companies and organizations providing support to victims.

Details of Services

Category	Services provided
Ensuring proper communications in affected areas	• OCN Internet connection service (NTT Communications) • Plala Internet connection service (NTT Plala)
Services offered free of charge	NTT Communications • Public wireless LAN services: Hot Spot and OCN Hot Spot • Weblog service: OCN Blogger • Cloud hosting services: Biz Hosting Basic, Biz Hosting Enterprise, Biz Hosting Global • For Twitter and Facebook users: CoTweet • Internet content delivery service: Smart Content Delivery (SCD) • Support for business continuity plan (BCP) measures: Disaster Recovery Solution Service NTT PC Communications • Internet connection service: InfoSphere Mobile Connection Service • Hosting service: WebARENA Hosting Service
Fee reductions and exemptions	Exemption of basic charges for period when communication services were inaccessible
Donation of relief money	Via nonprofit organizations, we donated to victims a portion of revenue from various services, as well as relief money received from customers via our portal sites. • Raised money through OCN Pay ON and OCN Point Program (NTT Communications) ¥76,400,300 (as of July 14, 2011) • ?goo? fund-raising (NTT Resonant) ¥25,879,159 (as of August 26, 2011) • E-Money Chocom fund-raising (NTT Smart Trade) ¥9,004,600 (as of April 26, 2011) • Internet connection service: Plala; video distribution service: Hikari TV (NTT Plala) ¥23,280,000 (as of May 10, 2011) • Point and ranking site: Potora (NTT NaviSpace) ¥8,548,500 (as of March 31, 2011) • Directory registration screening service: X-recommend (X-Listing) ¥2,310,000 (as of April 18, 2011)

Initiatives in Collaboration with Multiple Corporations and Universities

In April 2011, NTT PC Communications formed alliances with multiple corporations and universities to launch the Tsumugi Project, aimed at supporting restoration of areas affected by the Great East Japan Earthquake.

In a subsequent initiative under the same project, on May 30 we compiled a database of unidentified people in Iwate Prefecture and launched an identity confirmation system, which allows users to search and peruse the database. On July 1, we expanded the service to include Miyagi Prefecture and Fukushima Prefecture. We hope that these efforts will help clarify the identities of unidentified people across a broader geographical area.

This system addresses the needs of local people from areas affected by the disaster, including Ofunato City, Iwate Prefecture. In addition to gender and physical characteristics of unidentified

people, the service allows users to view images of their personal effects. It also enables more refined information searches.

The response in Iwate Prefecture when this service was launched was immense. On the first day alone, the site received around 40,000 site visits, and numerous people have accessed the service since then.

Through the Tsumugi Project, we will also seek to address future issues affecting the disaster-stricken region. In addition to cooperating with corporations, nonprofit organizations, and other related entities, we will build private networks within the region and develop and provide various applications to support the education of children in affected areas and other good causes. We will also provide support by organizing student volunteers. In these and other ways, we will embrace a multifaceted approach in devising measures to help restore areas affected by the disaster.

Initiatives by NTT employees to help people in areas affected by the Great East Japan Earthquake

In addition to helping via our main business, we delivered relief supplies to affected areas, and our employees raised funds to help disaster victims.

Fund-raising by employees was not limited to Japan. We also received cooperation from employees in overseas subsidiaries. At NTT Europe, for example, employees engaged in a variety of activities, including charity events. Under an NTT Group initiative, meanwhile, NTT Communications uses agricultural produce from Fukushima, Ibaraki, and Tochigi prefectures in its employee cafeterias.

Event at NTT Europe

Using ICT to support information-sharing in disaster-affected areas

Several days after the earthquake, NTT Communications established an information-sharing website related to the disaster as a voluntary initiative by employees. In this way, we took action to support the information-related needs of earthquake victims.

- ChiiTwi: Learning what's happening "right now" from locals on the ground
  ChiiTwi is a site that enables people to keep abreast of issues in various regions by providing up-to-date information about what is happening "right now" in each area. The site was created as the first step towards helping people "know what's going on locally" with regard recovery initiatives and to support efforts to that end.

- Neighboring Tweet confirmation site
  This site enables users to read area-specific groups of Tweets, simply by clicking the cursor on a map. It is a tool for gathering real-time information necessary for daily life in disaster-affected areas and includes information on meal preparation operations, stores that have reopened, hot spring spas that can be used, and other relevant information.

- #prayforjapan image attachments
  #prayforjapan is a Twitter page in support of Japan that receives Tweets from all around the world. It contains a site enabling users to select and view image file attachments. More than 3,000 beautiful, heartwarming photographs have been posted on Twitter by people praying for Japan's recovery. The site was created to raise the spirits of those on the ground who are working hard to restore the situation.

- Twitter site to lift the spirits: Tsubuyaki no Chikara (Power of Tweeting)
  This site enables users to group together and view uplifting Tweets. Immediately after the earthquake, the Twitter world was bombarded with numerous Tweets expressing sadness. We decided to create the site to help lift the spirits of those prone to becoming depressed by such messages.

- Rescue request Twitter search: SOS from Twitter
  Viewers of this site can bring together and read Tweets related to such matters as help requests and shortages of supplies. Tweets requesting help from disaster-stricken areas are automatically grouped together around the clock on the site. We created it in the hope of helping people in need of real assistance.

- Setsuden (Save Electricity) Now!: Powerful result if everyone joins the effort
  This site was designed to help spread the electricity reduction campaign throughout Japan, in the hope that it will alleviate the power shortage situation that has existed since the earthquake. Various ideas for saving electricity are posted on the site. Viewers can read and learn from such ideas, or they can easily post and share their own ideas, either on the site or via Twitter.

- Earthquake-related information in real time: Tweet by FastTweetLive
  This site allows users to display earthquake-related information on Twitter in real time. We created it in collaboration with Glucose Inc., with which we have an affiliation.

Comments from the Organizer

Our work normally involves planning and developing new Web services.

When the earthquake struck on March 11, we heard stories of tragedy and hardship from the affected regions. As engineers, we felt a deep sense of anxiety as we wondered what we could do to help.

So we decided to create services linked to the restoration of affected areas. Specifically, we developed sites to support restoration, in the hope of making a contribution, albeit a small one.

Since March 11, the situation on the ground has been changing dramatically. In this context, the most urgent priority is to swiftly deliver services matched to present needs. Based on this policy, we launched most of the services within several days of conception.

With speed being the top priority, services may not be perfect quality-wise. However, we all feel that we have created sites that contribute to the restoration of disaster-stricken areas.

CSR Report 2011

Our Relationship with Suppliers

NTT Communications established the CSR Procurement Policy to build strong ties based on trust with suppliers and all other business partners, and to ensure transactions are entered into in fairness and good faith.

Promoting Fair Transactions and Procurement (CSR Procurement)

Promoting Fair Transactions

NTT Communications is eager to earn the trust of society. In our relationships with business partners, we place primary importance on building ties which are acceptable and beneficial to both parties, who partake in transactions on an equal footing based on mutual respect for the other's position. In building a relationship of trust, it is important to clarify the roles and responsibilities of each party while respecting one another's corporate culture and practices. As professionals in the industry, we do not pursue benefit or convenience solely for ourselves, but seek growth together with our business partners through mutual stimulation and encouragement.
To raise the administrative efficiency of agreements and reduce related costs at NTT Communications and its business partners, the Company has promoted the adoption of electronic agreements since before fiscal 2009. In fiscal 2010, we entered into electronic agreements with around 30 companies.

CSR Procurement Policy

NTT Communications has to procure high-quality services and products in an economical and timely manner to be able to maximize competitiveness as a corporation, respond flexibly to customer demands and make continual improvements to our own services. NTT Communications therefore engages in fair and competitive procurement activities within the global market based on three basic procurement policies.
(1) Procure in an open and transparent manner according to business needs;
(2) Give all suppliers, Japanese or overseas, an equal opportunity to compete for our business;
(3) Apply global standers and market principles to procure competitive services and products matching our business needs;

Procurement Department Initiatives

The Procurement Department centrally manages procurement operations and supply agreements and carries out supply chain management to streamline and optimize procurement processes.
We assess the environmental activities of all suppliers of products and obligate them to observe our Guidelines for Green Procurement. We also seek understanding and cooperation through supplier group study sessions.
In fiscal 2010, we promoted Group-wide procurement initiatives by expanding procurement from companies successfully passing our green procurement assessment to the entire Group. Through two sessions of the Global Environmental Protection Promotion Sub-committee, we also worked to develop a shared understanding of trends related to the promotion of green procurement with various Group companies.
Looking ahead, we plan to further raise awareness of the importance of promoting green procurement among Group companies.

Promoting Green Procurement

Guidelines for Green Procurement

NTT Communications issued the second version of its Guidelines for Green Procurement in January 2006. As we aim to reduce environmental impact along the entire supply chain, the guidelines incorporate awareness toward environmental conservation into criteria for supplier assessment. Around 456 suppliers had been assessed as of the end of March 2011.
Version two of the Guidelines for Green Purchasing was revised in line with formulation of the NTT Group Energy Efficiency Performance Guidelines (the beginning of procurement of energy efficient ICT equipment) and was renamed as the Guidelines for Green Procurement in August 2010. Energy efficiency considerations for the procurement of ICT equipment have been added to these guidelines.
In fiscal 2010, we promoted Group-wide procurement initiatives by developing a shared understanding of trends related to the promotion of green procurement with various Group companies. Moreover, procurement from companies successfully passing NTT Communications? green procurement assessment was expanded to the entire Group.

Status of Green Procurement & Green Purchasing

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Green procurement of goods excluding office supplies (1,000 units)	2,760	1,520	1,370
Green purchasing of office supplies (1,000 units)	580	510	470

(Scope: NTT Communications (non-consolidated))

Click here to view the Guidelines for Green Procurement.

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Protecting the Environment

In line with our Basic CSR Policy, the NTT Communications Group is taking steps to reduce environmental impact in all our business activities. We are committed to providing information and telecommunications service solutions that reduce environmental impact, thereby helping to achieve a sustainable society that harmoniously coexists with the global environment.

▶ Basic Philosophy and Environmental Management

- NTT Communications Group Global Environmental Charter
- NTT Communications Group Long-Term Vision Regarding Environmental Protection
- Green ICT Vision 2020
- Fiscal 2010 Results and Fiscal 2020 Targets
- Fiscal 2010 material flow
- Framework and Fiscal 2010 Actions
- ISO 14001 Certification
- Environmental Accounting in fiscal 2010
- Initiatives in Environmental Education
- Objective/Level-Based Training
- Environment Day Established

▶ Global Warming Prevention

- Fiscal 2010 Initiatives
- Introduction of Exterior Wall-type Natural Refrigerant Circulation Cooling System
- Fiscal 2010 Results and Fiscal 2011 Outlook
- Compliance with the revised Law Concerning the Rational Use of Energy and local government ordinances
- Introduction of the NTT Group Energy Conservation Performance Guidelines
- Introduction of a Solar Power Generation System
- Installation of LED lights in data centers
- Prevention of Air Pollution and Energy Conservation with Electric Propulsion Ships
- Planting Rooftop Gardens
- Green walls
- Newest Green Data Centers
- Construction of the Tokyo No. 5 Data Center
- Electronic Billing Initiative
- Initiatives Relating to Company Vehicles
- Initiatives Relating to Office Buildings
- Installation of LED Lights and Reflectors
- Electricity-saving Measures at the Office

▶ Biodiversity Conservation

- Ecology in the Ocean
- Caring for Nature Reserves
- Following Guidelines
- Special Feature on Biodiversity on the "eco-goo" Portal

▶ Reduction of Waste

- Fiscal 2010 Initiatives
- Recycling of Dismantled Telecommunications Equipment
- Recycling of Construction Waste
- Recycling of Office Waste
- Vending Machines that Allow Use of a Personal Cup
- Reducing usage of paper for business purposes

▶ Prevention of Environmental Pollution

- Compliance with Environmental Legislation and Regulations
- Storage and Control of PCBs
- Asbestos Countermeasures
- Air Pollution Countermeasures
- Countermeasures to Ozone-Depleting Substances

▶ Promoting and Using Internal Green ICT

- Using Thin Client Terminals to Reduce Transportation and Paper Usage
- Promoting Use of the Company?s Internal Cloud
- Using Mobile Connect Service to Reduce Transportation
- Using Video Conferencing to Reduce Transportation Needs

▶ Reducing Environmental Impact Through Our Services

- Green ICT Initiatives
- Environmental Solutions Label System
- Acquisition of the eco-ICT Mark
- IPv6 Environmental Cloud
- Development of Charge Platform for EV Sharing
- Development of Environmental Solutions for Multi-store Chains
- goo Green Label Search Engine
- Green OCN
- Green Biz-IT

▶ Site Data

- Act on the Rational Use of Energy (Energy Conservation Act)
- Tokyo Metropolis
- Kanagawa Prefecture
- Yokohama City
- Saitama Prefecture
- Nagoya Prefecture
- Shizuoka Prefecture
- Kyoto Prefecture
- Kyoto City
- Osaka Prefecture
- Hyogo Prefecture
- Okayama Prefecture
- Hiroshima Prefecture
- Miyazaki Prefecture
- Kagoshima Prefecture

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Basic Philosophy and Environmental Management

To help bring about an environmentally friendly society and ensure that the Earth remains in a healthy state for future generations through our core businesses, we will make efforts to strengthen the framework of the NTT Communications Group for environmental management. To this end, we will aggressively pursue protection of the global environment in all processes pertaining to all our business activities, ranging from procurement, to operation and waste disposal.

Basic Philosophy and Vision

NTT Communications Group Global Environmental Charter

The NTT Group has established the NTT Group Global Environmental Charter to promote group-wide consideration and action, from a global perspective, relating to environmental protection. This philosophy and policy form the basis for the NTT Communications Group Global Environmental Charter, which is being disseminated among employees of the Group as a set of guidelines for implementation of environmental protection activities.
In fiscal 2010, based on the NTT Communications Medium- and Long-Term Environmental Vision, we added a guideline on actions for preserving biodiversity to the Basic policy.

NTT Communications Group Global Environmental Charter

Our Basic Philosophy
The NTT Communications Group will actively pursue conservation of the global environment and help to bring about an environmentally friendly society through all facets of its creation and provision of high quality services benefiting customers across the globe.

Our Basic Policy
The following policies apply to all our business activities.

1. Fulfillment of corporate responsibilities
We will comply with all domestic and overseas laws and regulations relating to environmental conservation as a matter of course and we will endeavor, having assessed the environmental impact of our business activities, to prevent pollution of the environment and seek continual improvements based on established targets in areas including energy and resource conservation and waste reduction.

2. Support initiatives for an environmentally friendly society
We will, through the development and provision of information-sharing platforms relating to environmental conservation and recycling as well as networking services enabling teleworking and other new lifestyle approaches, help to bring about a society with a low environmental impact which is friendly to people and to the Earth.

3. Contribution to the environment through social interaction
We will endeavor to support day-to-day environmental protection activities in partnership with local communities and government authorities.

4. Disclosure of environmental information
We will disclose environmental information and engage in relevant communication both internally and externally.

5. Biodiversity preservation and sustainable utilization (ecosystem preservation and sustainable utilization)

We will promote harmonious coexistence with the natural world by recognizing the benefits we receive from ecosystems and the impact of our business activities upon them (in addition to taking action to reduce environmental impact).

NTT Communications Group Long-Term Vision Regarding Environmental Protection

We established the Long-Term Vision Regarding Environmental Protection as a guide for carrying out environmental preservation and protection activities. As a concrete step toward achieving this vision, we also established the Green ICT Vision 2020 in fiscal 2010. Our goal is to help create a society that is friendly to the global environment, humans, and other living things. We will therefore utilize telecommunications and ICT technologies to help achieve a low-carbon society, promote a recycling-based society, and preserve biodiversity, while collaborating with customers, business partners, government agencies, educational institutions, NGOs, and NPOs.

NTT Communications Group Long-Term Vision Regarding Environmental Protection

In our view, humanity has a duty to turn the Earth back into a place where humans and all other living things are able to coexist indefinitely. To restore the Earth to such a state, first there needs to be a shift in values across society, for example in political, economic, educational and cultural spheres. Instead of exalting material wealth, we must embrace values that put priority on the sustainability of humanity and the natural environment. For there to be a shift in values, allowing the world to embark on change, it is of utmost importance that people around the world engage in dialogue and gain mutual understanding. We will take advantage of the global reach of our telecommunications networks and the latest ICT advances to provide platforms enabling the exchange and sharing of knowledge, which is unevenly distributed across the world, and also to support communication among people around the globe. In this way, we can help to bring about a sustainable, spiritually rich society.

The NTT Communications Group will join hands with industry, governments, academia and communities around the world to pursue this vision.

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Green ICT Vision 2020

In fiscal 2010, the NTT Communications Group formulated Green ICT Vision 2020, which sets forth new policies for environmental protection activities and targets for fiscal 2020. We are promoting our three "eco" initiatives of Green of ICT, Green by ICT, and Green with Team NTT, in order to help enrich and streamline social activities, and to support the harmonious coexistence of all living things on our beautiful planet.

The promotion of these initiatives enables us to address the need to achieve a low-carbon society, promote a recycling-based society, and preserve biodiversity, as well as to help create a society that is friendly to the global environment, humans, and other living things.

- Green of ICT
  Reducing the increasing environmental impact of ICT equipment and facilities through the use of technology and process innovations.

- Green by ICT
  Reducing society's environmental impact through the use of ICT to improve transportation efficiency for people and goods, and by moving away from resource-intensive operations to, for example, a paperless workplace.

- Green with Team NTT
  Initiatives to reduce environmental impact in employees homes and local communities.

Fiscal 2010 Results and Fiscal 2020 Targets

Guided by Green ICT Vision 2020, we are working to realize a low-carbon society, promote a recycling-based society, and preserve biodiversity. We will reduce the environmental impact of all of our business activities. Our targets for fiscal 2020 are to reduce our greenhouse gas emissions to 318,000 t-CO_2, (a reduction of more than 15%, from the fiscal 2008 level); achieve a final waste disposal rate of 2% or less; and reduce the volume of paper used per person to 8,500 sheets a year (a reduction of around 30%, from the fiscal 2008 level).
In fiscal 2010, we made active efforts to reduce paper consumption and our environmental impact through intensive management at the level of buildings and business sites.

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Environmental Impact Reduction Initiatives, Targets and Achievements in Fiscal 2010

		Fiscal 2010 Target	Fiscal 2010 Achievements	Assess-ment	Fiscal 2011 Initiatives	Fiscal 2020 Targets
CO₂ emissions	Telecom equipment	Target: 315,000 t-CO_2 or less[1]	297,000 t-CO_2[1] · Outdoor units for air conditioners and filter cleaning: reduction of 1,944 tons · Turning off idle equipment: reduction of 1,394 tons · Upgrading older air conditioners: reduction of 960 tons · Raising temperatures slightly in machine room cooling systems: reduction of 742 tons · Close wireless stations: reduction of 36 tons · Upgrading facilities (higher capacity and conversion to DC): reduction of 1,073 tons · Reducing use of older facilities as a result of service elimination: reduction of 2,531 tons · Installing solar power systems: reduction of 82 tons	🍀🍀🍀	Target: 294,000 t-CO_2 or less[1] · Outdoor units for air conditioners and filter cleaning: reduction of 3,032 tons · Turning off idle equipment: reduction of 1,247 tons · Upgrading older air conditioners: reduction of 1,026 tons · Raising temperatures slightly in machine room cooling systems: reduction of 890 tons · Close wireless stations: reduction of 0 tons · Upgrading facilities (higher capacity and conversion to DC): reduction of 733 tons · Reducing use of older facilities as a result service elimination: reduction of 1,434 tons · Installing solar power systems: reduction of 85 tons	318,000 t-CO_2 or less[2] (reduction of more than 15% from the fiscal 2008 level)
	Offices	Target: 24,000 t-CO_2 or less[1]	22,000 t-CO_2[1] · Installing reflector lights and adopting automatic light level adjustment systems · Lowering blinds before leaving the office, and ensuring that lights are turned off when not in use · Continued promotion of dressing warmer in winter and cooler in summer	🍀🍀🍀	Target: 21,000 t-CO_2 or less[1] · Using energy-efficient PC settings, unplugging PC power cables when leaving the office, turning off PCs when not in use · Selective operation of elevators and air conditioning systems · Continued promotion of dressing warmer in winter and cooler in summer	

Waste	**Recycling rate for dismantled telecom equipment**	Target: At least 99%	96% · Improving the recycling rate for glass and ceramic scrap (glass scrap, FTC,*3 and ball insulators)	✲	Target: At least 99% · Internally using dismantled telecom equipment · Promoting the internal use of unneeded articles of inventory and other items · Promoting further recycling, including at Group companies	Goal for all waste: Final disposal rate*5 of 2% or lower
	Recycling rate for construction waste	Target: Specified materials: At least 99% Other: At least 84%	Specified materials: 98.3% Other: 92.0% · Promoting measures to reduce final disposal volume · Completely eliminating waste that must be transported directly to final disposal plants · Promoting subcontracting to processing companies with higher recycling rates	✲	Target*4: Specified materials + metals: At least 99% Other: At least 75% · Promoting measures to reduce final disposal volume · Completely eliminating waste that must be transported directly to final disposal plants · Promoting subcontracting to processing companies with higher recycling rates	
	Recycling rate for office waste	Target: At least 70.0%	72.4% (for a total emission volume of 3,460 tons) · Recycling plastic waste · Promoting thermal recycling · Highlighting best practices from each organization	✲✲	Target: At least 76% · Promoting thermal recycling · Intensive management at the building level	
Paper usage (office paper, A4 size equivalent)		Target: 9,500 sheets per person	9,314 sheets per person · Visualizing paper usage status (double-sided printing rate, consolidated printing rate) · Highlighting best practices from each organization · Promoting the use of a video conferencing system	✲✲✲	Target: 9,300 sheets per person · Strengthen measures at the level of individual organizations based on data on multi-function printer usage · Introduce ICT equipment and other devices that realize a paperless working style	8,500 sheets per person (30% reduction per person from the fiscal 2008 level)

Self-assessment: ✲✲✲ Good progress ✲✲ asically on target ✲ lightly behind target

(Scope: 14 domestic companies of the NTT Communications Group)

*1 The CO_2 emission coefficient is 0.378 kg-CO_2 per kWh.

*2 The CO_2 emission coefficient is 0.33 kg-CO_2 per kWh.

*3 Fire-tight covers (FTC) are used to protect communication cables from fire.

*4 Materials were reclassified in fiscal 2011.

*5 Final disposal rate is culculated as the volume of waste transported to the final processing site divided by the total volume of waste generated

Environmental Impact of Business Activities

Fiscal 2010 material flow
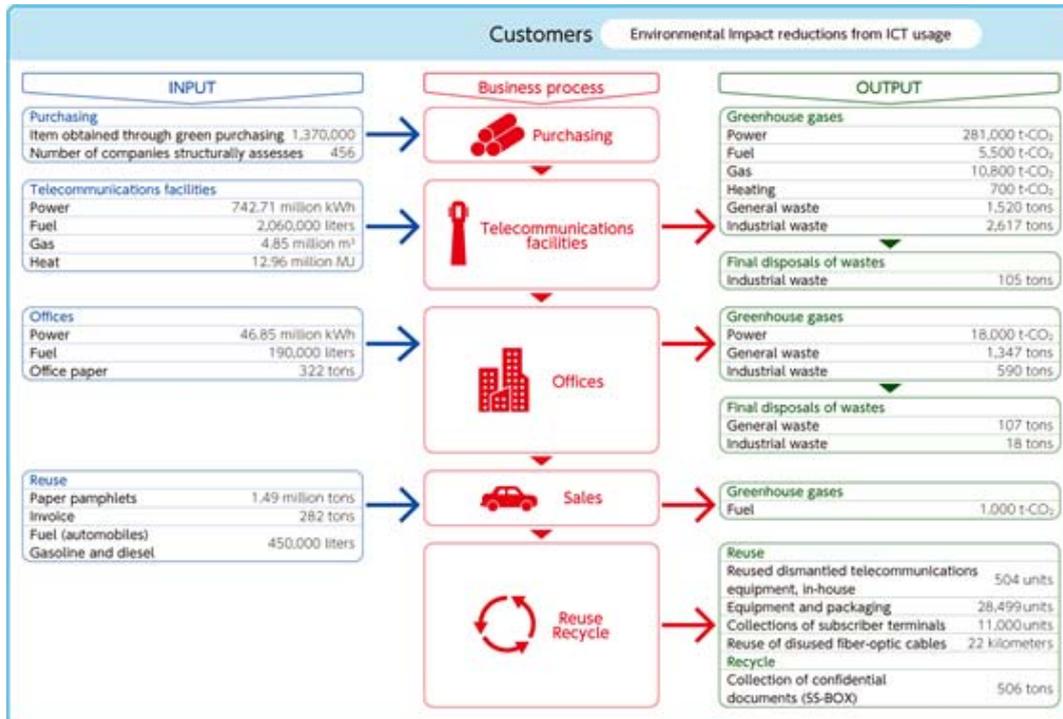
Click here to view an enlarged diagram summarizing inputs and outputs of the NTT
Communications Group for fiscal 2010

Environmental Management Structure

Framework and Fiscal 2010 Actions

In order to continuously promote environmental protection initiatives, we formed a working group
for each issue, involving the entire NTT Group in tackling environmental issues.
As a general rule, we hold Environmental Protection Subcommittee meetings twice a year to
formulate an overall plan encompassing a wide range of issues, including reduction of greenhouse
gas emissions, reduction of waste, and promotion of environmental solutions. Through these
meetings, we also share information on the results of actions taken and promote horizontal
expansion of various initiatives.
From fiscal 2009, we streamlined the bases for environmental management at key global
locations, and expanded the scope of environmental protection initiatives at telecommunications
and data center buildings, as well as office buildings.

Environmental Protection Framework

President	Working group	Main Tasks
CSR Committee (CSR office) — Global Environmental Protection Sub-committee (Environmental Protection Office) — Environmental Protection Sub-committee	Greenhouse Gas Reduction	●Press ahead with Total Power revolution campaign to cut electricity consumption ●Visualize the energy usage at telecommunication and data centers and implement energy-saving measures at regular intervals ●Promote installation of top-runner equipment
	Dismantling Communications Equipment	●Process and manage dismantled equipment in line with the law
	Construction Waste	●Process and recycle construction waste ●Eliminate asbestos and manage reconstruction
	PCB Storage and Disposal	●Store and recycle construction biphenyls ●Submit polychlorinated biphenyls management report to the government
	Office Environmental	●Aid efforts to share and resolve issues in activities to reduce paper usage, cut waste, and conserve electricity ●Make the impact of PDCA efforts visible, establish targets, and formulate policies ●Share and commonly apply examples of advanced efforts from each business unit
	Environmental Measures Sub-working Group	●Maintain system that factors in locations and other elements within business units and educate on the environment ●Plan and deploy conservation initiatives through small independent group from business unit
	Customer Waste	●Treat and manage industrial waste from installation projects for customers ●Put industrial waste treatment manuals through small independent groups from business unit
	Container Recycling	●Comply with the Containers and Packaging recycling Law
	Green Procurement	●Encourage green purchasing companywide ●Educate suppliers on green purchasing guidelines
	Environmental Accounting	●Build environmental accounting system for management
	Community contributions related to environmental protection	●Promote Green with Team NTT ●Print business cards solely on kenaf to ease deforestation ●Recycle and donate PCs to nonprofit organizations
	Environmental Solutions Working Group	●Undertake environmental public relation (notable by informing about and promoting environmentally friendly service) ●Push ahead with Green ICT initiatives ●Create and deploy new solutions
	Group company working group	●Expand working group initiatives groupwide and institute PDCA cycles

[Click here for an enlarged diagram showing the environmental protection framework](#)

ISO 14001 Certification

Five companies within the NTT Communications Group had acquired ISO 14001 certification as of March 31, 2011.
Through contracts with outside environmental consultants, certified departments and companies undergo internal audits once a year to ensure appropriate implementation of environmental management and continual improvements that will allow a steady reduction of the environmental impact of business activities. Regular reviews and renewal examinations are also undertaken by an independent certification body. Outstanding issues are thus identified and remedial measures are swiftly taken. Besides initiatives centering on reduction of office paper and electricity usage and promotion of waste recycling, we are pursuing the following measures as part of our contribution to the creation of an environmentally friendly society.

ISO 14001-certified Company

ISO 14001-certified Company		Date of Certification	Status of Initiatives	
			Main Initiatives Contributing to an Environmentally Friendly Society	Related Company Websites
NTT Communications Corp.	Procurement Dept. *	October 1999	· Promoted procurement of energy-saving ICT equipment in line with the adoption of the Energy Performance Guidelines · Cleaned a park in Tokyo twice · Held a rummage sale of goods brought in by employees, donating the proceeds to the Japan Fund for Global Environment. · Held internal and external seminars to raise awareness of the environment	
	Solution Services Dept. * Engineering Division I, Engineering Division II, Planning Division	March 2004	· Provided ICT solutions, such as video conferencing systems, that help achieve a low environmental impact society · Created environmentally friendly proposals and designs · Ensured proper disposal of industrial waste · Enhanced employee awareness of the environment through employee seminars (held annually) and other activities	
NTT World Engineering Marine Corp.		July 2001	· Reduced fuel consumption of the vessels that lay submarine cable by implementing an energy-saving operation policy · Implemented paper usage reduction policies, including introducing paperless meetings (using PCs) · Promoted introduction of video conferencing systems · Ensured proper disposal of industrial waste · Improved the environmental awareness of all employees through education	Click here for details on environmental initiatives

NTTPC Communications, Inc.	**November 2003**	· Developed framework by assigning internal energy managers following the enforcement of the Law concerning the Rational Use of Energy · Environmentally friendly data center employing solar power, DC power supply and rooftop greenery · Installation of an eco-friendly tea dispenser requiring personal cups, as a replacement for a vending machine using paper cups, in an effort to contribute to global environmental protection. · Reduced paper usage through the introduction of multi-function printers (by approximately 23% from the previous year) · Raised awareness of the importance of a recycling-oriented society and the environment through the Shiroi Satoyama Forest Preservation Activity · Fostered environmental awareness by ensuring all employees take an environmental e-learning class, and implemented a management system (one class held)	
NTT BizLink, Inc.	**March 2007 (company-wide)**	· The ordering rate for environmentally friendly pamphlets reached 100% for the fourth year in a row · Reduced copy paper usage (by 16% from the previous year) · Reduced the amount of office supplies purchased (by 44% from the previous year) · Reduced electricity usage (by 6% from the previous year) · Participated in the Ecocap Movement of collecting and selling used plastic bottle caps to fund vaccines (collected enough bottle caps for 42 vaccine doses) · Implemented a training session on greenhouse gas emissions trading led by an external guest instructor, as well as an internal EMS training seminar. · Reduced CO_2 emissions by promoting green ICT (provided data center-related services and video conferencing services; reduction of 176,842 t-CO_2 per year compared to conventional methods)	Click for details on NTT BizLink environmental protection activities
NTT FANET SYSTEMS Corp.	**April 2007**	· Conserved power by fine-tuning PC power settings, monitor brightness level and other parameters; turned off fluorescent lights during the day; fully adopted cooler dress in summer and warmer dress in winter. · Reduced paper usage by enforcing double-sided and reduced-size printing. · Enforced the reuse of waste paper · Promoted green purchasing · Reused and recycled all unneeded PCs	

As of March 31, 2011

* indicates new organization names as of August 1, 2011

Figures inside parentheses indicate actual results from fiscal 2010.

Environmental Accounting

Environmental Accounting in fiscal 2010

NTT Communications tabulates environmental conservation cost (categories corresponding to business activities) and economic benefit associated with environmental conservation activities (real financial impact) in line with Environmental Accounting Guidelines 2005, issued by the Ministry of the Environment, and NTT Group Environmental Accounting Guidelines.
Total environmental conservation cost in fiscal 2010 was approximately 2,503 million yen, consisting of around 1,765 million yen in investments and around 738 million yen in expenses. This represents an increase of around 363 million yen compared to the previous fiscal year.
On the other hand, the economic benefits derived from the environmental conservation measures in fiscal 2010 included approximately 358 million yen gained from comprehensive implementation of environmental measures in offices, such as electricity usage reduction and expansion of the number of sites targeted. At the same time, the launch of the Mypage* website helped reduce mailing costs and paper usage, generating cost savings of approximately 540 million yen and new equipment purchases were reduced 647 million yen by reusing equipment. As a result, overall economic benefits amounted to around 1,644 million yen, an increase of around 519 million yen from the previous year.

* Mypage
A service providing notification via the Internet and/or email of billing information relating, for example, to NTT Communications telephone charges, and which also allows receipt display and printing. By using the Internet and email to notify customers of billing information instead of conventional printing and postage, it is quicker and easier for customers to locate relevant information. This contributes to protection of not only paper resources, but also energy resources required for printing and delivery.

Environmental Conservation Cost-Categories Corresponding to Business Activities (Million yen)

Category		Key measures	Investment		Expenses	
			FY2009	FY2010	FY2009	FY2010
(1) Business area cost			1,506.0	1,765.3	526.6	737.7
Breakdown	1. Pollution prevention costs	· Asbestos removal and disposal, etc. · Oil tank facility for engine generator	355.2	477.0	36.1	23.1
	2. Global environmental conservation costs	· Maintenance expenses for air-conditioning facilities for machinery rooms · Air-conditioning facilities for machinery rooms	1,150.9	1,276.5	85.8	109.8
	3. Resource circulation costs	· Waste disposal and reuse expenses	-	-	404.6	496.3
(2) Upstream / Downstream costs		· Mypage system improvements	-	11.8	31.7	7.0
(3) Administration costs		· Greening of buildings; usage fees for environmental information system	-	-	64.5	91.6
(4) R&D costs		· NTT Communications' portion of holding company's environmental R&D expenses	-	-	6.2	-
(5) Social activity costs		· Donations to environmental conservation organizations	-	-	5.0	9.9
(6) Environmental remediation costs			-	-	-	-
Total			1,506.0	1,765.3	634.0	737.7

Economic Benefit Associated with Environmental Conservation Activities (Real Financial Impact) (Million yen)

		FY2009	FY2010
Revenue	Revenues from sales (cables, metal scrap, etc.)	100.1	98.5
Cost reductions	Reductions in expenses derived from measures such as reduced electricity usage	2.1	358.1
	Reductions in new item purchases generated by equipment reuse	594.2	647.0
	Decrease in postal and paper costs from utilization of Mypage	428.7	540.3
Total		1,125.1	1,643.9

(Target period: April 1 - March 31)
(Scope: NTT Communications (non-consolidated))
Tabulation and disclosure: Figures were tabulated in line with the Ministry of Environment's Environmental Accounting Guidelines 2005 and NTT Group Environmental Accounting Guidelines. Expenses include personnel expenses but exclude depreciation.

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Environmental Education

Initiatives in Environmental Education

Environmental awareness activities and environmental education, offered to all employees according to job type and description, have purposely been incorporated into CSR training and the NTT Communications Group is always seeking new ways to raise employee awareness of environmental matters. We have also been extending the scope of participation to include not just employees, but also their families and business partners.
In fiscal 2010, as part of the Green with Team NTT initiative, we implemented a range of environmental awareness activities and environmental education, including cleanup activities in various regions and the elimination of disposable chopsticks from cafeterias. Participation-oriented CSR activities were also held to raise awareness and educate our workforce about the environment.

Objective/Level-Based Training

We provide level-based classroom instruction and participatory seminars on a regular basis to executives, CSR promotion leaders (leaders who promote environmental conservation initiatives in each workplace), general employees, and newly hired employees.
As a result of our environmental education, there has been an increase in the number of kaizen (continual improvement) suggestions related to environmental protection submitted to the in-house company blog and Eco Suggestion Boxes. The NTT Communications Group is committed to listening to the suggestions of each of our employees, and to expanding our environmental protection initiatives in our business activities and office operations.

- Publishing of pamphlets using a printing method that does not require heating to dry the ink
- Stopping the supply of hot water to lavatories (in summer)
- Introduction of automatic light level adjustment systems
- Use of automated blinds to improve air-conditioning efficiency
- Installation of toner-saving software
- Standardization of items to be sorted inside buildings
- Elimination of disposable chopsticks from cafeterias
- Reduction in the number of print copies for shared viewing (one set per room as a rule)
- Introduction of personal cups

Environment Day Established

The NTT Communications Group has designated June as Environment Month, and the fifth day of every month as Environment Day, with the aim of increasing internal environmental awareness. Working in close coordination with participation-oriented CSR activities, such as community cleanup activities and environmental beautification activities targeting rivers, the NTT Communications Group will strive to increase the awareness of employees in regard to environmental preservation activities.

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Biodiversity Conservation

Together with global warming prevention, the preservation of ecosystems, where living things co-exist in an intricate balance, has recently developed into a major environmental challenge influential to the creation of a sustainable society.

The NTT Communications Group makes an effort to avoid affecting ecosystems through business activities such as the construction and dismantling of wireless relay stations within nature reserves. We also engage broadly in awareness activities and dissemination of information through the "eco-goo" portal of Group company, NTT Resonant Inc., on which a special biodiversity website was set up early on.

Laying of Submarine Cables

Ecology in the Ocean

The NTT Communications Group is also actively taking steps to protect the oceanic environment when providing global network services. NTT World Engineering Marine Inc. (NTT-WE Marine), which lays and maintains submarine cables, has designated the prevention of ocean pollution as one of its basic policies. When building submarine network infrastructures, we maintain a high level of awareness as a company that is closely involved with the natural marine environment. Our intention is to fully comply with environment-related laws and regulations, including MARPOL 73/78 (a treaty for preventing marine pollution), and to harmoniously coexist with marine life forms and the fishing industries.

Designing cable routes to protect coral reefs

When designing routes for laying submarine cables in shallow offshore areas, we take care to select cable routes that avoid coral reefs. Where intersecting with coral is unavoidable, we try to lay the cables in naturally occurring trenches in the ocean floor to disturb the coral as little as possible. We also make sure to cooperate with the Ministry of the Environment and other related agencies and government bodies, as well as local fishing industry associations when we plan and lay cables.

We lay cables on the sand, away from coral reefs

Cables are laid in natural ocean floor trenches

Collecting trash from the bottom of the ocean

Before laying or burying submarine cables, we clean the planned ocean seabed route. We collect abandoned fishing nets, rope, and wires during the cleanup operation and take them back to the construction base and properly dispose of them as industrial waste.

Trash collected from the bottom of the ocean

Consideration for the marine biotope on cable-laying vessels

On the cable-laying vessel *Subaru*, the crew take care to clean the anchor chain and rocker, thoroughly removing all mud and attached debris to avoid transporting organic life to other parts of the ocean. This effort helps to protect ocean biotopes.

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Considerations During Wireless Station Construction and Dismantling

Caring for Nature Reserves

As of March 31 2011, 10 of our 135 wireless stations for telecommunications and broadcasting networks were in national parks. The NTT Communications Group carefully considers biodiversity requirements in building micro-roads that we need to patrol and maintain these facilities, adhering strictly to the law and our own environmental assessment methods.

Wireless station

Following Guidelines

We produce wireless station construction plans after surveying the distributions of plant, bird, and insect life, and other habitat distribution factors to prevent damage to the biotope. If identifying animals and plants on the World Conservation Union's Red List of endangered species, we contact third-party government bodies and nonprofit organizations to ensure that our construction plans do not affect biodiversity.

In surveying, planning, designing, and working on station sites and roads, we will continue to adhere to our guidelines at each step of our operations to safeguard nesting areas, animal paths, and vegetation.

Awareness Activities Through Provision of Information

Special Feature on Biodiversity on the "eco-goo" Portal

NTT Resonant Inc. took the lead in setting up a special biodiversity site on its Japanese "eco-goo" portal in January 2008. The site uses a test and other features to convey information about biodiversity in a straightforward manner. In April 2009, NTT Resonant joined the Japan Business Initiative for Conservation and Sustainable Use of Biodiversity (JBIB) and worked to enhance the information available through collaboration with the NTT Group and a wide range of corporations in the run-up to the International Year of Biodiversity in 2010.

Special feature on biodiversity on the "eco-goo" portal

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Global Warming Prevention

Although the advancement and spread of ICT are adding convenience to lifestyles and business, the increase in power consumption by ICT-related equipment is placing enormous pressure on the environment. The NTT Communications Group's employees are responding eagerly to energy efficiency improvements and other initiatives, as they progress as a team toward voluntary company targets set for telecommunications equipment, which account for around 90% of total CO_2 emissions from business activities, through to energy savings by offices.

Fiscal 2010 Results

Fiscal 2010 Initiatives

We are vigorously pushing ahead with power savings under the "Green of ICT" concept. Through improvements to equipment inside data centers and telecommunications buildings, as well as to operating methods, we enable efficient operation of ICT equipment that boasts high reliability and high quality, and yet has a minimized environmental impact.

In fiscal 2010, in order to improve the efficiency of our air-conditioning equipment, which accounts for half of our electricity consumption, we implemented various creative kaizen (continual improvement) ideas suggested by people in charge of operations, such as upgrading to higher-efficiency models, designing a wiring layout that takes airflow into account, and trapping cool air. We also established procurement and design guidelines and adopted them into our operations. For example, we actively introduced telecommunications equipment that runs on a DC power supply.

In terms of purchasing renewable energy, we began operation of a 162-kilowatt solar system at our data center in Tokyo in May 2009, as the first step toward installation of a 5-MW system in 2012, which is the goal for the entire NTT Group.

Trapping cool air under the double floor using a drawstring seal

Wiring layout with dual-walled structure (underfloor)

Introduction of Exterior Wall-type Natural Refrigerant Circulation Cooling System

We introduced a natural refrigerant circulation cooling system that uses the exterior walls of a building at our Tokyo No. 5 Data Center as one initiative aimed at harmony with nature. This air conditioning system is integrated with the building and uses indirect exterior air to reduce electricity consumed by air conditioning and CO_2 emissions. The goal is to reduce air conditioning CO_2 emissions by 2% (451t-CO_2 per year), which is equivalent to the amount of CO_2 absorbed by about 29,000 50 year-old fir trees.

Fiscal 2010 Results and Fiscal 2011 Outlook

When calculating the volume of greenhouse gas emissions that we generate, we include buildings owned by other companies (where we rent spaces for offices, data centers, and colocation services), in addition to buildings owned by the NTT Communications Group.
In fiscal 2010, strong performance in our data center business saw CO_2 emissions from telecommunications facilities increase steadily. However, following the stipulation of the revised Law Concerning the Rational Use of Energy in Japan to carefully delineate between primary and secondary use of power, greenhouse gas emissions from NTT Communications alone actually declined by 9,000 t-CO_2 from fiscal 2009 to 297,000 t-CO_2.
Emissions of greenhouse gases other than CO_2 saw mixed results compared to fiscal 2009 levels, with the following results: CH4: 34 t-CO_2 equivalent (down by 168 t-CO_2 equivalent); N2O: 100 t-CO_2 equivalent (up by 4 t-CO_2 equivalent); and HFC: 0 t-CO_2 equivalent (down by 0.1 t-CO_2 equivalent).
The total amount of electricity purchased in fiscal 2010 was 790 million kWh (down 20 million kWh from the previous fiscal year), while 203,000 kWh was generated in-house using renewable energy sources.
In fiscal 2011, we plan to continue making improvements to our telecommunications facility buildings and data center facilities, as well as to their operation methods. We will actively install energy-saving devices and share information regarding energy conservation measures with global sites and Group companies in collaboration with the personnel there. We also plan to expand our solar power generation system to 300 kW.

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CO_2 Emissions from Business Activities

(Unit: 10,000 t-CO_2)
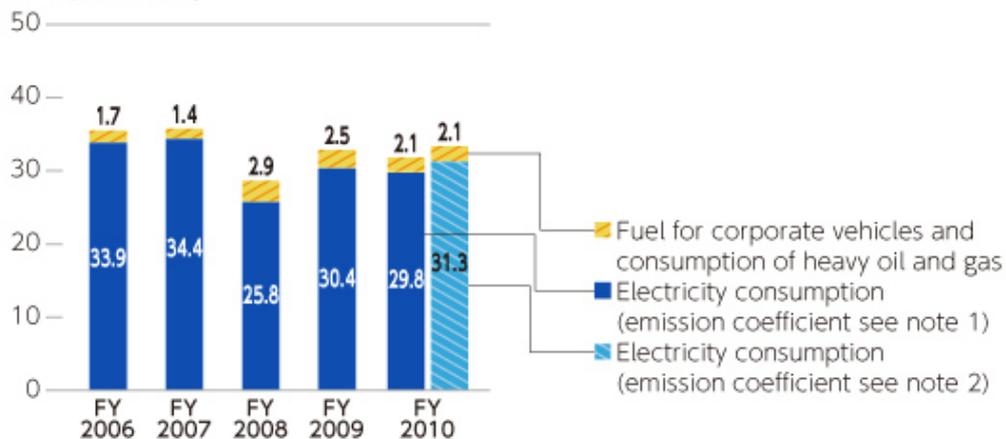
(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008 and 12 Group companies for fiscal 2007 and fiscal 2006.)

Note 1: The CO_2 emission coefficient in the dark blue bars is 0.378 kg-CO_2 per kWh.
Note 2: The CO_2 emission coefficients used in the light blue bar are from electric power companies.
Note 3: Through to fiscal 2007, CO_2 emissions from other telecommunications operators (telecommunications facilities) inside our buildings had been included in the calculation. However, beginning in fiscal 2008, only net emissions (excluding those from other telecommunications operators) are included.

Other Greenhouse Gas Emissions (Converted to CO$_2$ Equivalent)
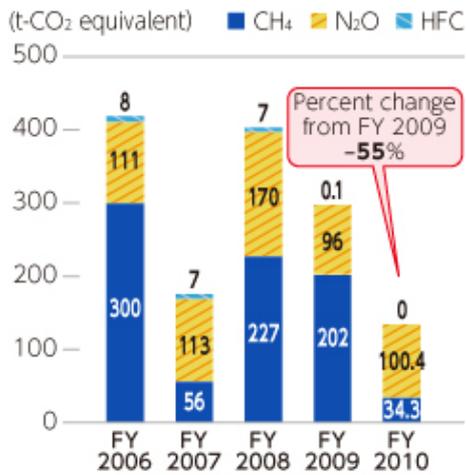
(t-CO$_2$ equivalent)　■ CH$_4$　■ N$_2$O　■ HFC

Percent change from FY 2009 −55%

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008 and 12 Group companies for fiscal 2007 and fiscal 2006.)

Number of Cogeneration Systems
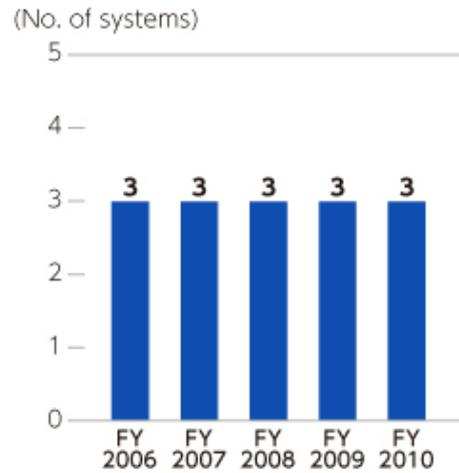
(No. of systems)

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008 and 12 Group companies for fiscal 2007 and fiscal 2006.)

Power purchases
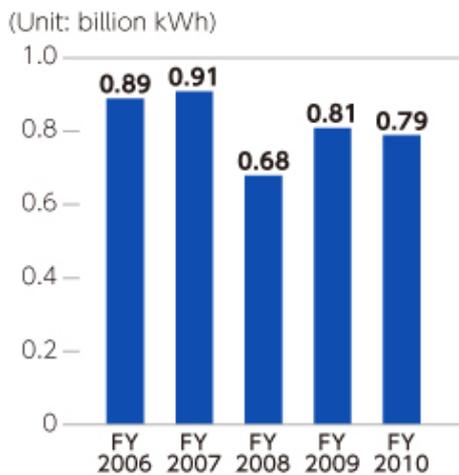
(Unit: billion kWh)

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008 and 12 Group companies for fiscal 2007 and fiscal 2006.)

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Compliance with Revised Laws and Regulations

Compliance with the revised Law Concerning the Rational Use of Energy and local government ordinances

In line with the requirements for business operators to submit reports in accordance with the standards stipulated in various laws and regulations, we have been reporting on our energy usage and reduction plans.
The Law Concerning the Rational Use of Energy (hereinafter "the Energy Conservation Law") underwent revision in April 2010, which included changing how energy use is assessed from a site-by-site basis to a company basis. A second study session on key points of legal revisions was held with group companies in April 2010, including confirmation of whether each company would be newly subject to management/reporting, and dealing with new procedures that will occur.

NTT Communications appointed its overall energy manager as a director in charge of CSR and its energy management planner as the head of the Environmental Protection Office based on its CSR structure. In this way, we made energy conservation a part of internal business activity, and set up an internal structure to support it.

Specific activities will include studies into initiatives and execution management aimed at attaining fiscal 2020 targets and reporting to the authorities, as well as grasping the status of energy usage. These will be undertaken by the Greenhouse Gas Reduction Working Group of the Environmental Protection Subcommittee.

By ensuring that information is collected and shared within the Group in a timely manner, the NTT Communications Group as a whole is continuing its efforts to comply with laws, regulations, and ordinances.
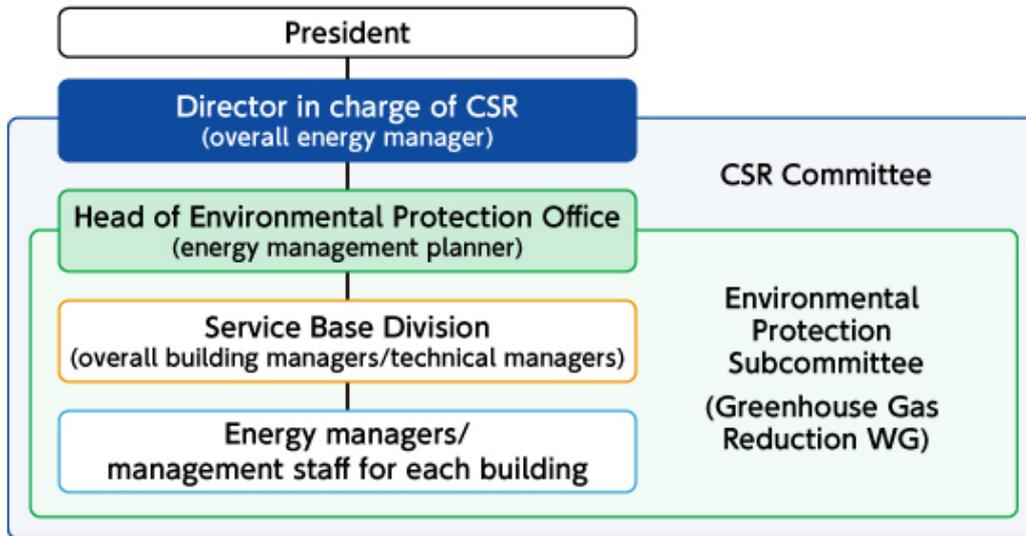
NTT Communications Energy Management Structure

The following website provides details on the Global Warming Countermeasure Plan/Report:

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Initiatives Related to Telecommunications Facilities

Introduction of the NTT Group Energy Conservation Performance Guidelines

As part of our initiatives to prevent global warming, the eight companies of the NTT Group, including NTT Communications, established the NTT Group Energy Conservation Performance Guidelines and began implementing the necessary actions in April 2010.

These Guidelines established by the NTT Group are modeled after the ICT Ecology Guidelines created by the ICT Ecology Guideline Council, and spell out our basic philosophy regarding the development and procurement of the ICT devices, such as routers and servers, used by the NTT Group.

We are developing and procuring equipment ICT equipment designed to conserve energy as well as for functionality, performance and cost-efficiency. In fiscal 2010, we purchased approximately 600 servers with the highest energy conservation performance (five stars). We will continue to expand the scope of energy-saving equipment that we use.

Introduction of a Solar Power Generation System

In May 2009, we started operating a 162-kilowatt power generation system at a data center in Tokyo employing solar panels installed on the roof. The system is expected to generate around 170,000 kWh per year. The generated electricity is used in part to power the air-conditioning equipment and office equipment inside the data center. We will gradually introduce solar power systems to other buildings and disclose information on power generation.

In fiscal 2010, we generated a total of 225,981 kWh of electricity. This translates into a reduction of 85,421 kg-CO_2, equal to the amount of CO_2 absorbed by 6,101 Japanese cedar trees in one year.

Solar panels installed at Tokyo No. 5 Data Center

Also Introduced to Tokyo No. 5 Data Center

We also introduced solar power generation to the Tokyo No. 5 Data Center, which began service from April 2011. Solar power generation panels installed on the south-facing wall can generate approximately 30kW of electricity, which is used for lighting in common areas of the building. Since covering the entire wall with black panels would seem oppressive, this center used a design that combines a white wall with the black panels.

Installation of LED lights in data centers

NTT Communications installed LED lights in some of its data centers in addition to its office buildings. LED lights offer the benefits of reduced electricity usage and lower maintenance costs due to their longer service life. They also help reduce the electricity required for air conditioning because they operate at a cooler temperature.

We plan to actively promote installation of LED lights in our data centers and office buildings in order to help alleviate global warming.

LED lights at a data center

Prevention of Air Pollution and Energy Conservation with Electric Propulsion Ships

The undersea cable-laying ship Subaru is one of the few ships in Japan with an electric propulsion system (electricity from a generator drives the propulsion motor). The system helps to prevent air pollution by reducing NOx and SOx contained in engine exhaust. In operating the ship, we realize energy savings of about 10% per year by efficiently controlling the number of generator-driven engines operating, for example, running 3 engines when heading to a construction site and running 2 engines when returning.

Cable-laying Ship *Subaru* (9,557 tons)

In addition, rust and seashells on the hull are eliminated by sandblasting to reduce resistance in

the water, and very smooth paint conforming to the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS Treaty) is used to paint the hull after sandblasting, to conserve energy.
We are also conserving energy by introducing LED lighting for ships and reducing their environmental impact by replacing their air conditioning systems.

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Planting Rooftop Gardens

We are using rooftop gardens *1 on our data centers and other facilities to reduce the heat island effect *2 as part of our green ICT efforts.
These gardens also shield buildings from heat and reduce the power consumption of air-conditioning systems. Another benefit is that they clean the air by absorbing CO_2 and discharging oxygen, as well as improving living environments and beautify views.

*1 Rooftop gardens
Cultivating such gardens is one way of improving living environments. Evapotranspiration from plants lowers ambient temperatures and blocks heat, helping to cut a building's energy consumption.
*2 Heat island effect
This is a phenomenon where summer temperatures in urban areas rise several degrees above surrounding areas because of heat from asphalt surfaces, buildings, air conditioners, and car exhausts. The term stems from the way that cities appear as islands of heat in thermal images compared with surrounding rural areas.

Rooftop garden on a telecommunications building in Tokyo

Rooftop garden on an office building in the Kansai area

Green walls

NTT Communications began installing green walls on telecommunications buildings in Tokyo. Like rooftop gardens, green walls help reduce the heat island effect and prevent overall temperature rise in building by shielding them from the sun. They also reduce the power consumption of air-conditioning systems and beautify the view.
The Tokyo No. 5 Data Center, which began service from April 2011, has green walls on its east and south faces from ground level to about 15m in height.
By implementing various greening measures according to the structures and uses of individual buildings, we plan to help prevent global warming and promote harmonious coexistence with the natural world through our business activities.

Building with green walls

Green walls

Building with green walls

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Construction of New Data Centers

Newest Green Data Centers

NTT Communications is constructing green data centers equipped with cutting-edge ICT technology in Singapore and Hong Kong, two global cities that are representative of Asia. The Singapore Serangoon Data Center is scheduled to begin service in the fourth quarter of fiscal 2011.

This center specially designed to suppress the transmission of heat from the exterior wall of the building to inside the building, exceeding the Singapore heat conduction standard by as much as 70%, the highest figure in Southeast Asia. In this way, it has been designed to suit the natural environment. Morevoer, by partially introducing rotary uniterruptible power supply (UPS), which integrates UPS and generators, the center no longer generates batteries for disposal, which occurred with previous power sources. This has also helped to make the building greener. The center was awarded high marks from the Singapore Building & Construction Authority's (BCA) evaluation system for environmental consideration for its introduction of high-efficiency air conditioning, use of recycled water, use of recycled materials, and introduction of LED lighting. It received a Green Mark PLATINUM, the highest rating, in June 2011.

We are also working on green initiatives at the Lundy Data Center in California, USA. In one of these, fuel cells that generate electricity using biogas, reducing CO_2 emissions to zero, were introduced in the first quarter of fiscal 2011. We obtained Green Credits for the resulting reduction in CO_2, and these can be used for emissions trading.

This center also trialed an air conditioning control system that analyzes and learns the environmental characteristics within the data center, and automatically controls air conditioning in line with the temperature and changes in the environment. The trial achieved a 20% reduction in electricity consumption by the air conditioning system, and the system was fully introduced in September 2011.

Rotary UPS

Fuel cell

Construction of the Tokyo No. 5 Data Center

NTT Communications constructed the Tokyo No. 5 Data Center, featuring cutting-edge green performance, and started service from April 2011.
In addition to highly efficient electrical facilities and air conditioning, this center pursues "Green ICT" by aggressively incorporating natural energy to reduce electricity consumption. As a result, the center has a Power Usage Effectiveness*1 (PUE) below 1.45, the highest performance for a data center in Japan, and Life Cycle CO_2*2 ($LCCO_2$) is about 15% lower (equivalent to about 6,300 ton-CO_2) compared to conventional buildings.
In June 2011, the data center won the overall grand prize in the data center division in the Fifth ASP-SaaS-Cloud Awards 2011 hosted by the ASP-SaaS-Cloud Consortium (ASPIC).

The Tokyo No. 5 Data Center

*1 PUE (Power Usage Effectiveness)
A benchmark indicating energy efficiency of data centers and server rooms. It is derived by dividing the overall electric power consumption of a data center by the electric power consumption of the center's ICT equipment.
PUE is culculated as the overall electricity consumption of a data center divided by the electricity consumption of the center's ICT equipment
*2 $LCCO_2$ (Life Cycle CO_2)
Total amount of carbon dioxide (CO_2) emitted through the life cycle of a building from construction to operation to demolition.

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Transportation Initiatives

Electronic Billing Initiative

The revised Energy Conservation Law implemented in April 2006 requires that parties providing and seeking transportation services endeavor to save energy. We annually audit transportation volumes for invoices, sales promotion tools, and office waste. We voluntarily seek ways to streamline transportation, such as reducing the number of transportation trips, the volume of items transported and the transportation distance, and otherwise enhance logistics.
We have cut the use of transportation by promoting the convenience of our online billing information service. In addition, to further reduce transportation, we have made the Internet our standard means of invoicing since October 2008 instead of mailing billing statements (mainly for individual users of OCN Internet services).
Thanks to our continued promotion of Internet-based billing using emails, the volume of paper used for invoices in fiscal 2010 fell to 216 tons from 265 tons in fiscal 2009, a reduction of approximately 19%.
We also implemented various measures to improve our transportation efficiency, reducing our total transportation by 37,000 ton-kilometers from the previous year, or about 6%.

Goods Transportation Volume under the Revised Energy Conservation Law

(Unit: 10,000 metric ton-kirometers)
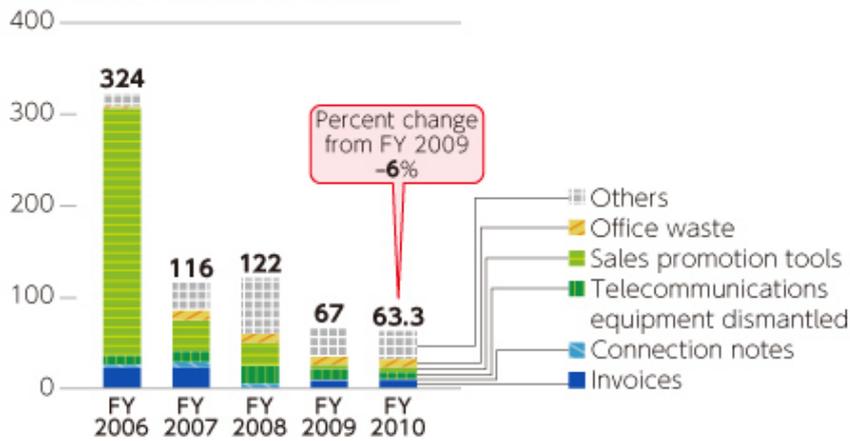
(Scope: NTT Communications (non-consolidated))

Number of Mypage Subscribers and Paper Usage for Billing Statements

(Unit: 10,000 subscribers)   (Unit: metric tons)
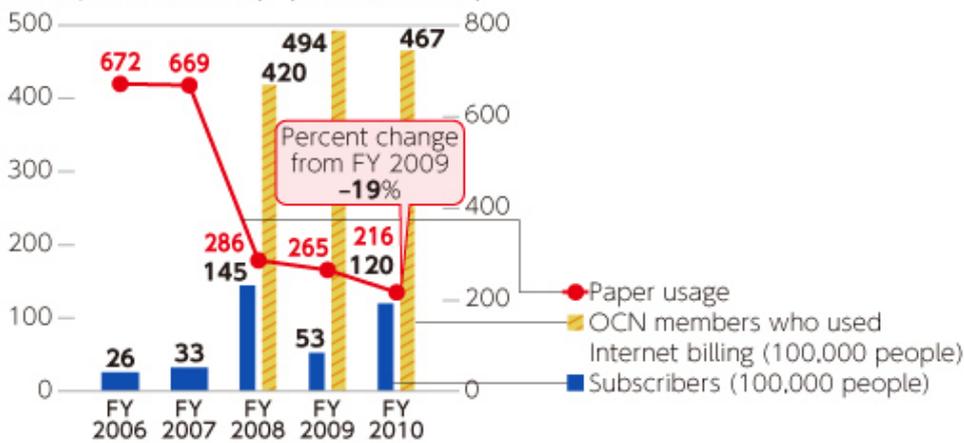
(Scope: NTT Communications (non-consolidated))

Initiatives Relating to Company Vehicles

We have taken a number of proactive steps in relation to company vehicles, including introducing hybrid vehicles, raising employee awareness of ecologically sound driving practices, and implementing modal shifts to public transportation. As a result, fiscal 2010 use of gasoline by company vehicles was reduced to 118,000 liters, a decrease of approximately 152,000 liters from the fiscal 2009 level, while the use of diesel was 7,000 liters.

Fuel Consumption by Company Vehicles

(Unit: 10,000 liters)
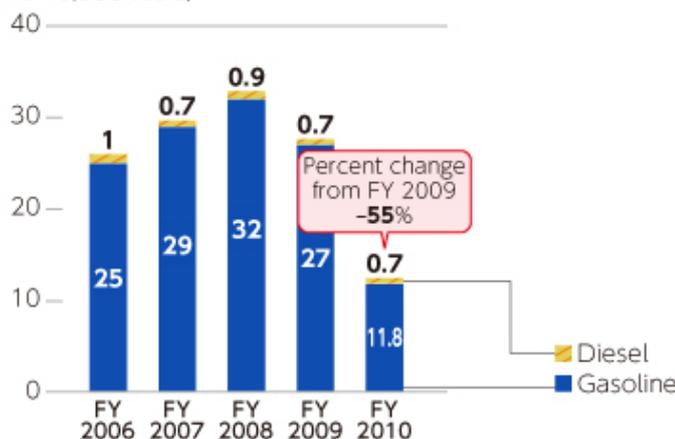
(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008 and 12 Group companies for fiscal 2007 and fiscal 2006.)

Office Initiatives

Initiatives Relating to Office Buildings

NTT Communications established the Office Environmental Working Group for evaluating and implementing all environmental protection measures related to offices, and created a policy that allows each business operation to undertake autonomous office-related environmental initiatives. These initiatives are not limited to locations in Japan, but are also being actively carried out at our overseas subsidiaries, tailored to the individual circumstances of each country.

In Japan, we have been operating the Office Database Visualization Website, which tallies and visualizes environmental impact data related to electricity, paper, and waste for each organizational unit, on our Company's intranet since August 2009. The employees responsible for promoting office-related environmental measures in each organization analyzed the data posted on this website in detail and carried out autonomous PDCA cycles taking into account business content and characteristics, in an effort to reduce electricity and paper usage.

In fiscal 2010, this website was used to accelerate autonomous initiatives from original and inventive ideas at each organization. Specific measures varied by organization, including reducing CO_2 emissions by utilizing video-conferencing for regular meetings, turning garbage from dining halls into fertilizer, and analysis and management of the ratio of office paper used in color printing. Furthermore, by featuring best practices from various organizations every month and sharing them through the intranet, successful measures are disseminated between organizational units.

In office areas, we utilize RenaCast Spot Media, a streaming information bulletin board, to help employees improve their environmental awareness on a daily basis, for example, by highlighting best practices, promoting trash sorting, and encouraging employees to turn off lights when not in use and to use double-sided or consolidated printing. Furthermore, an Environmental Email Newsletter, sent to all employees by the Environmental Protection Promotion Office every month, includes monthly trends in environmental data, features the initiatives being taken by various organizations, and helps employees improve their skill levels, for example, by providing advice to those employees hoping to obtain "eco certification".

Office database visualization website

Clarification of rules for sorting items (by building)

Installation of LED Lights and Reflectors

In order to reduce the amount of electricity consumed for lighting, NTT Communications installed LED lights and reflectors in its headquarters building in Hibiya.

After confirming the effectiveness of the reflectors, which were introduced on a trial basis, a total of 2,408 reflectors were installed in all office floors of our Hibiya building in fiscal 2010, with installation completed in February 2011. Together with installation of 293 LED lighting units and 417 LED light bulbs, we expect CO_2 emissions to be reduced by about 197t per year.

This initiative is also something that is visible to employees, and we are using it as a tool to raise awareness with regards to energy conservation. We plan to expand this policy, which achieves both energy conservation and operational comfort, to other office buildings too.

Fluorescent light bulb with reflector

Electricity-saving Measures

Electricity-saving Measures at the Office

NTT Communications aims to save as much electricity as possible at its offices, since it will be difficult to reduce electricity usage significantly at data centers and telecom buildings, which are required to operate stably.
We have targeted a 30% reduction in electricity usage through measures such as limiting air conditioning, lighting, and elevator usage, setting PCs on power-saving mode and pulling out power cords when not in use, as well as work-style reforms such as introducing a summer time system and refraining from working after regular hours.

CSR Report 2011

Reduction of Waste

The NTT Communications Group is making a concerted effort to minimize environmental impact through the reduction of waste generated by business and office activities and the improvement in reuse and recycling rates.

Waste Reduction and Recycling Initiatives

Fiscal 2010 Initiatives

The NTT Communications Group is working to reduce volumes of dismantled telecommunications equipment, construction waste and office waste and is promoting reuse and recycling.
In fiscal 2010, final disposal of waste from dismantled telecommunications equipment amounted to 105 tons, construction waste 623 tons, and office waste 397 tons. Because of the lack of major projects compared to the previous fiscal year, the total volume of final disposal waste decreased by 2,775 tons year on year to 1,125 tons, and the total volume of waste generated decreased 28,948 tons to 21,535 tons.

NTT Communications Group Final Disposal Waste and Total Waste Generation
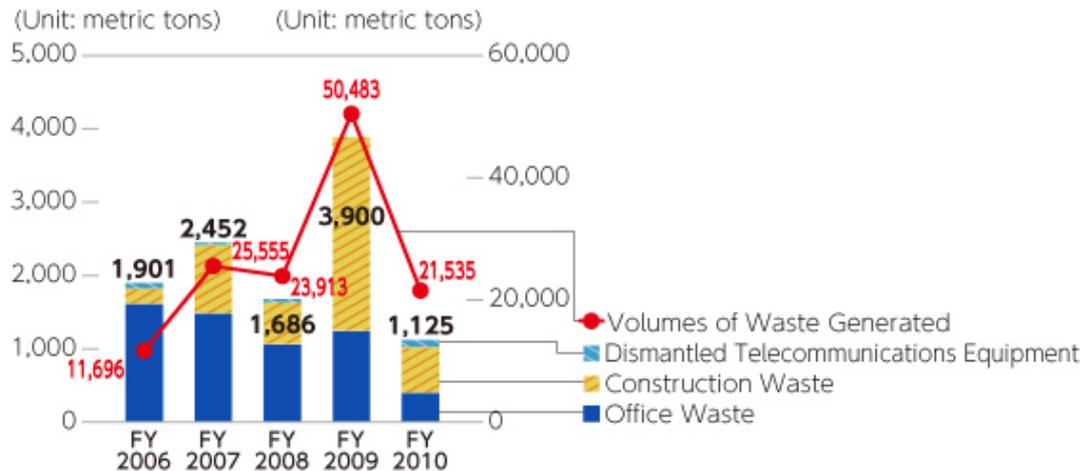
(The scope of tabulations for office waste and construction waste was 14 NTT Communications Group companies for fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008, and 12 Group companies from fiscal 2006.)
(The scope of tabulations for dismantled telecommunications equipment was 14 NTT Communications Group companies in fiscal 2010, and NTT Communications on a non-consolidated basis for fiscal 2006 to fiscal 2009.)

Recycling of Dismantled Telecommunications Equipment

We upgrade telecommunications equipment and cables to provide more reliable, higher-quality services. Wherever possible, we try to reuse telecommunications equipment that is no longer needed in-house and within the NTT Group, and to properly dispose of the remainder in compliance with laws and regulations relating to industrial waste and industrial waste requiring special handling.
In fiscal 2010, the volume of dismantled telecommunications equipment declined by 259 tons from fiscal 2009 to 2,516 tons. The recycling rate rose further from the previous fiscal year, reaching 99.9%. Recycling of glass and ceramic scrap (glass scrap, FTC* and ball insulators) reached 99.99% as a result of subcontracting to processing companies with high recycling rates. The recycled volume of removed optical cables, however, declined to 22km.

We will continue to further efforts for reuse and recycling, and aim to increase the recycling rate for the entire corporate group.

* FTC (fire-tight cover)
Fire-proof cover for protecting telecommunications cables against fire.

Total Volumes and Recycling Rates of Dismantled Telecommunications Equipment
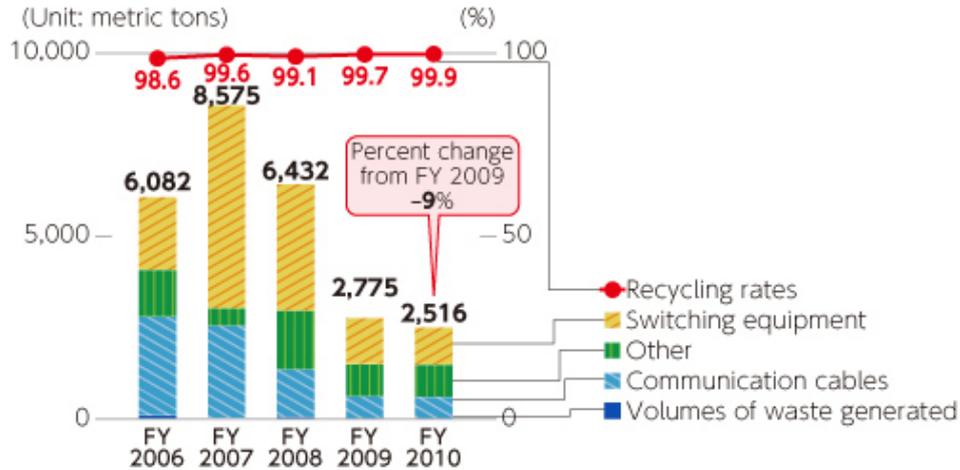
(Scope: NTT Communications (non-consolidated))

Volume of reused fiber-optic cable
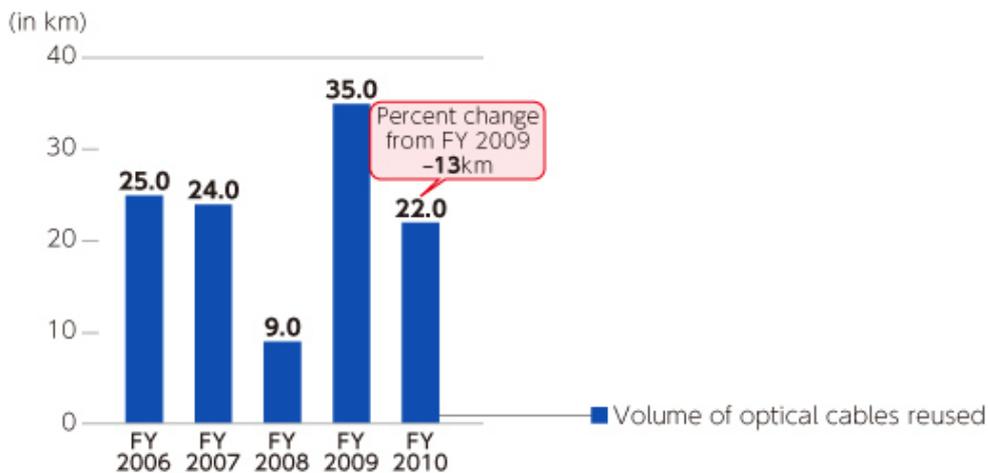
(The scope of tabulations was 14 NTT Communications Group companies for fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008, and 12 Group companies from fiscal 2006.)

▎Recycling of Construction Waste

In order to continue offering customers highly reliable services, we are rebuilding old facilities and implementing expansion and remodeling to accommodate rising demand.
In fiscal 2010, the volume of construction waste generated decreased by 28,762 tons from the fiscal 2009 level to 15,458 tons. The recycling rate for designated materials such as concrete fell from 99.7% to 98.3%, but the recycling rate for non-designated material rose from 73.9% in the previous fiscal year to 92.0%. The improvement in the recycling rate for non-designated materials was the result of efforts to thoroughly sort waste on-site.
We are pushing ahead with ongoing efforts to promote reduction of final disposal waste, reduce the amount of waste taken directly to final disposal sites to zero, and outsource jobs to contractors with high recycling rates.

Total Generation and Recycling Rates of Construction Waste
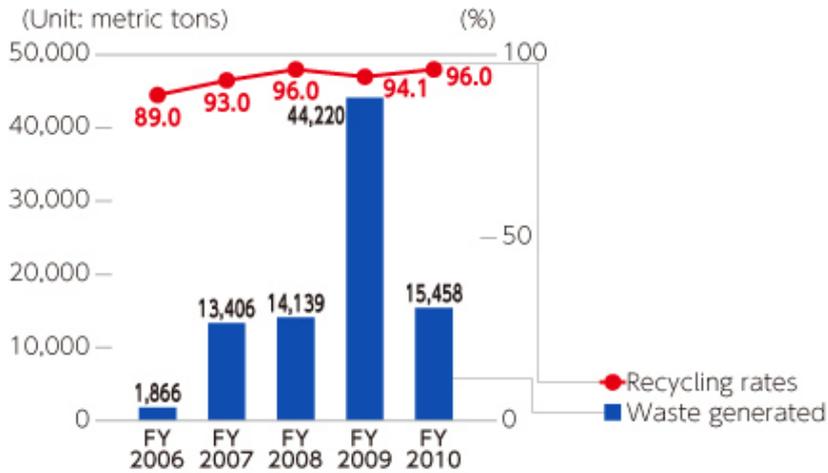
(The scope of tabulations was 14 NTT Communications Group companies for fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008, and 12 Group companies from fiscal 2006.)

Recycling of Office Waste

The NTT Communications Group ensures proper disposal, control, and complete sorting of waste in compliance with laws and regulations. In fiscal 2010, the total volume of office waste generated decreased by 28 tons from fiscal 2009 to 3,460 tons. The volume recycled was 2,503 tons, and the recycling rate was 72.4%. We are expanding the scope of our efforts toward the complete sorting of waste through enhanced collaboration with building management companies, in addition to continued employee education.

Thermal recycling of plastics was initiated at offices in Tokyo in December 2009, and the recycling rate improved to around 6%. We also began thermal recycling of burnable trash in April 2010. The recycling rate was improved to 14% by outsourcing the processing to a thermal recycling company. Through these efforts we have raised the recycling rates at our three main office buildings (Hibiya, Shiodome and Tamachi) from 67% to 88%. We are also exploring ways of improving the recycling rate at other offices throughout the corporate group.

We will continue to work harder and collaborate with our subcontractors to improve the quality of our recycling system, achieving environmental protection at the same time as securing the security of recycled confidential documents.

Total Office Waste and Recycling Rates
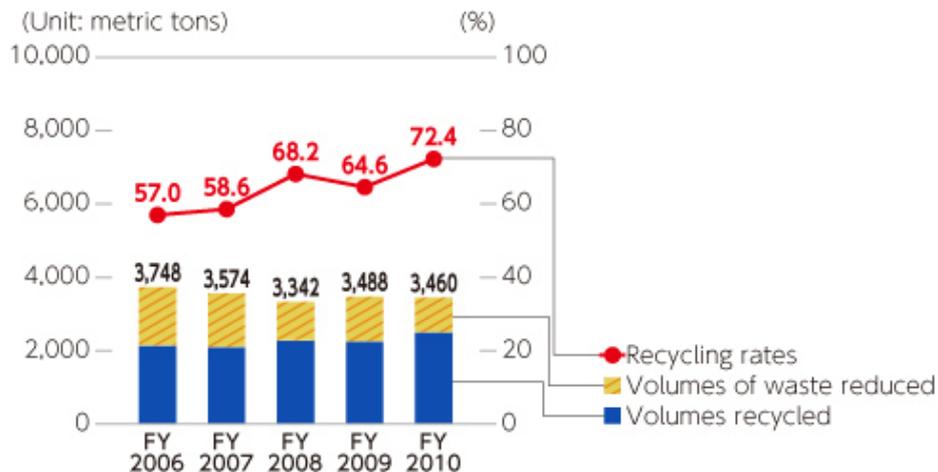
(The scope of tabulations was 14 NTT Communications Group companies for fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008, and 12 Group companies from fiscal 2006.)

Vending Machines that Allow Use of a Personal Cup

In September 2010, NTTPC Communications replaced all the vending machines in its head office building and the Kanda building (15 machines in total) with eco-conscious models that allow purchased beverages to be poured directly into the user's own cup.

The switch has reduced the number of paper cups used by just under 400 per month, equal to a reduction of around 10 rolls of recycled toilet paper per month.

The improved lineup of vending machines, introduction of machines that accept electronic payment, and discounts for using a personal cup, have both reduced the environmental load and helped to raise employee satisfaction.

Measures such as this raise awareness and foster an environmental outlook among employees to reduce waste in their everyday work. We will continue to pursue initiatives that ease the environmental burden and in which at the same time employees can readily participate.

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Initiatives for Reducing Paper Usage

Reducing usage of paper for business purposes

NTT Communications is working to reduce usage of all kinds of paper for business purposes, including office paper and paper for printing customer billing statements.

In fiscal 2007, we established a paper usage index per full-time employee in order to reduce office paper usage. In fiscal 2010, we completed full introduction of multi-function printers with an IC card authentication function, and utilized printing log data as part of efforts to raise awareness and further reduce paper use. Specifically, data on the number of sheets used, the double-sided printing rate and the consolidated printing rate are automatically collected and analyzed by individual and section, with the results disclosed to all employees on a monthly basis. Reports are also posted on the multi-function printers that employees regularly use showing their usage in comparison with the company average. We also continue to encourage digitization of paper documents and the use of projectors in conference rooms instead of printed meeting materials. In fiscal 2010, paper consumed per full-time employee (converted to A4-size office paper) declined by 1,201 sheets from fiscal 2009, to 9,314 sheets.

During fiscal 2011, while taking account of actual business conditions, we plan to accelerate the implementation of practical measures based on the usage of multi-function printers, and to promote the use of ICT to further reduce paper use.

Total and Per-Employee Office Paper Usage
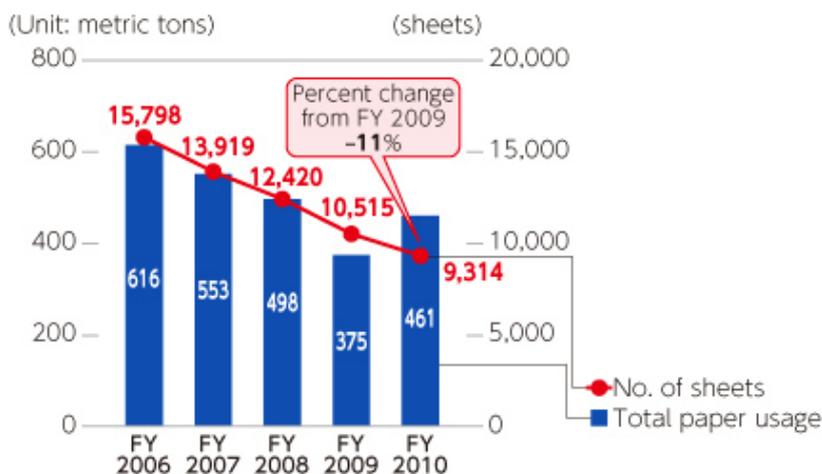
(The scope of tabulations for total office paper usage was 14 NTT Communications Group companies for fiscal 2010, 13 Group companies for fiscal 2009, 11 Group companies for fiscal 2008, and 12 Group companies from fiscal 2006.)
(The scope of tabulations for office paper usage per full-time employee was NTT Communications on a non-consolidated basis.)
* Tabulation errors for total usage in fiscal 2009 have been corrected.

CSR Report 2011

Prevention of Environmental Pollution

The NTT Communications Group is taking various steps to prevent actualization of a broad range of environmental risks stemming from business activities, such as environmental pollution and hazardous substance leaks. Measures include improvements to facilities and methods of operation, bolstering of management, and education and training.

Conformance with Environmental Legislation

Compliance with Environmental Legislation and Regulations

The NTT Communications Group devotes itself to ensuring legal compliance and proper risk management while liaising closely with other corporations of the NTT Group. Legislation of all kinds, including environmental laws and ordinances, emissions standards and the PRTR Law*, is fully communicated to related departments, and independent guidelines have been established for in-house application. We are also enhancing compliance education.
We were not involved in any litigation or legal violations pertaining to environment-related accidents, infringements, fines or complaints during fiscal 2010. We plan to continue our companywide efforts to prevent environmental pollution and comply with related laws and regulations.

* PRTR Law:
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Handling of Environmentally Hazardous Substances

Storage and Control of PCBs

The NTT Communications Group appropriately manages devices that contain PCBs (polychlorinated biphenyl). Such devices were used in the past as insulators for electrical facilities. As a policy for PCB storage, we have put in place a set of guidelines prescribing early detoxification treatment as well as methods for ascertaining conditions and management when use of equipment containing PCBs is to be continued.
NTT Communications was confirmed to be in possession of 3,875 systems containing PCBs in fiscal 2010, and will continue to carry out thorough management of items stored and in use while working toward formulation of a medium- and long-term plan targeting proper PCB processing.

PCB storage site

PCB containing devices in storage

Number of transformers in our possession
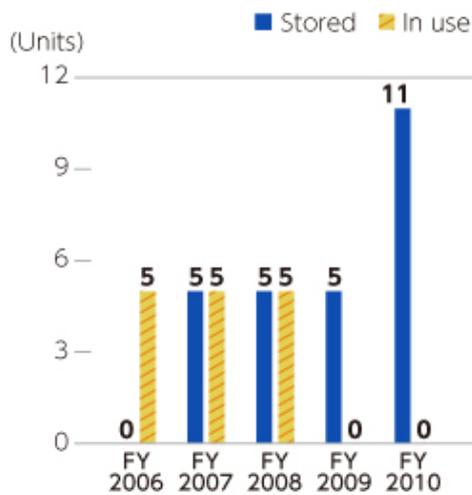
(Scope: NTT Communications (non-consolidated))

Number of high-voltage capacitors in our possession
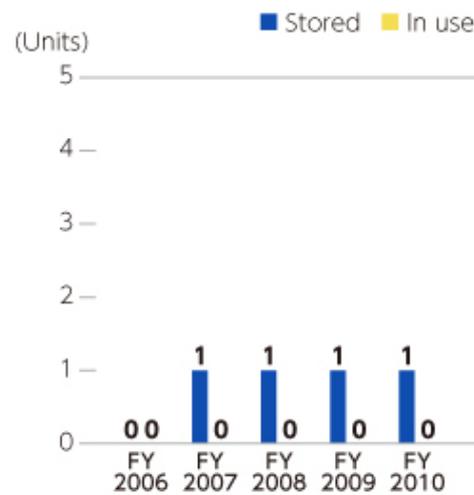
(Scope: NTT Communications (non-consolidated))

Number of low-voltage capacitors in our possession
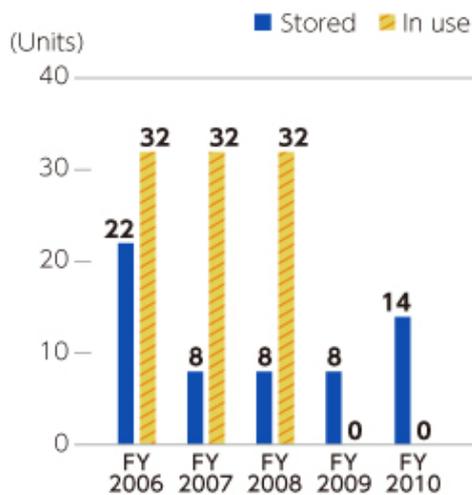
(Scope: NTT Communications (non-consolidated))

Number of Ballasts in our possession
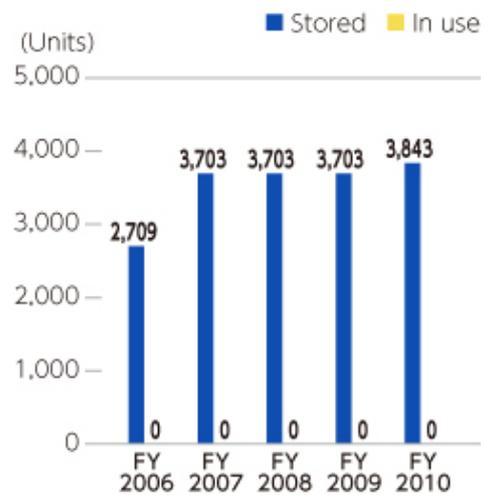
(Scope: NTT Communications (non-consolidated))

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Asbestos Countermeasures

Asbestos countermeasures for buildings and offices involved implementation of airborne asbestos surveys of buildings for which asbestos had been spray-applied to confirm that levels did not exceed statutory limits, which were revised in September 2006.
Since no buildings were demolished in fiscal 2010, no asbestos emissions were detected.
There are no plans to demolish buildings in fiscal 2011.
We are going to continue systematic implementation of appropriate measures such as removal, containment or enclosure of asbestos in buildings where it is present in line with manuals issued by the Japan Construction Occupational Safety and Health Association and individual local authorities.

Asbestos Emissions
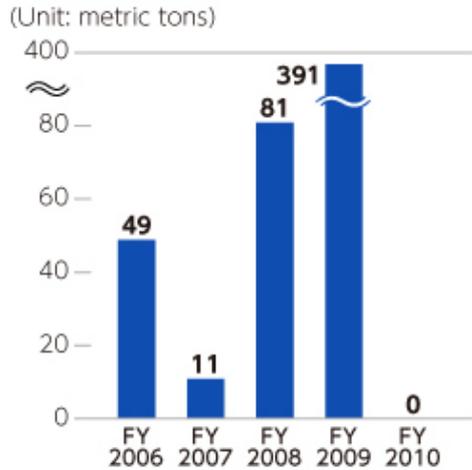
(Unit: metric tons)

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, and 12 Group companies in fiscal 2007 and fiscal 2006.)

Air Pollution Countermeasures

Our business activities emit NOx and SOx, which cause air pollution.
Approximately two-thirds of the NOx emissions are attributable to the use of gasoline and diesel in our operational vehicles, with the remaining one-third emitted during generation of the electricity we use.
Most SOx (around 88%) is emitted during generation of the electricity we use.
In fiscal 2010, we increased our NOx emissions from the fiscal 2009 level by 145 tons to 507 tons, and SOx emissions by 2 tons to 162 tons.
We will continue to take action to mitigate global warming and prevent air pollution, for example, by promoting environmentally conscious driving techniques and reduction of electricity usage.

NOx Emissions
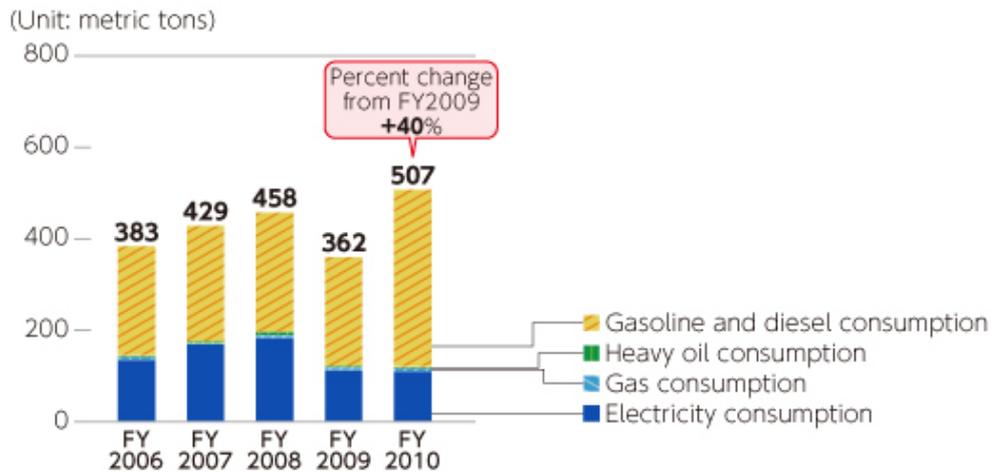
(Unit: metric tons)

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007 and fiscal 2006.)

SOx Emissions

(Unit: metric tons)
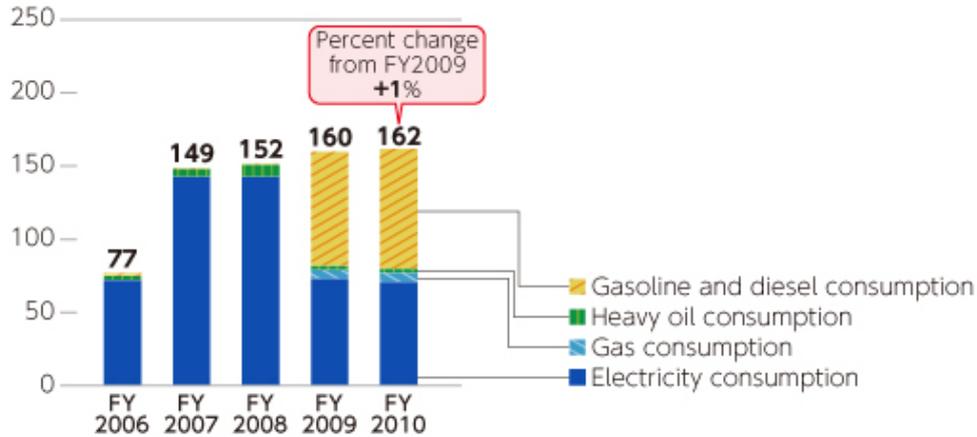
Percent change from FY2009 +1%

- Gasoline and diesel consumption
- Heavy oil consumption
- Gas consumption
- Electricity consumption

(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007 and fiscal 2006.)

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Countermeasures to Ozone-Depleting Substances

We dispose of ozone-depleting substances in an appropriate manner. The volume of specified halons used in our fire extinguishing equipment in fiscal 2010 was approximately 143 tons, roughly the same as in fiscal 2009. Meanwhile, the volume of specified halons used in our air-conditioning equipment in fiscal 2010 was around 176 tons, an increase of 37 tons from fiscal 2009.

Volume of Specified Halons Used in Fire-Extinguishing Equipment

(Unit: metric tons)
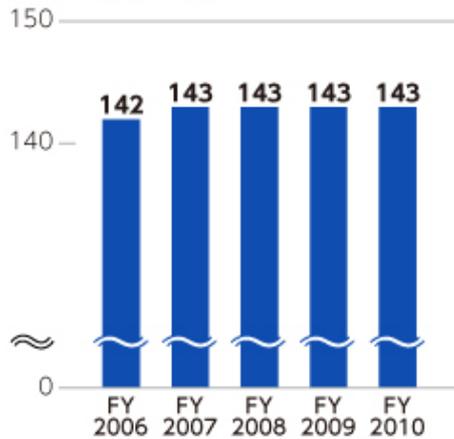
(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007 and fiscal 2006.)

Volume of Specified CFCs Used in Air-Conditioning Systems

(Unit: metric tons) ■ CFC ◪ HCFC ◩ HFC
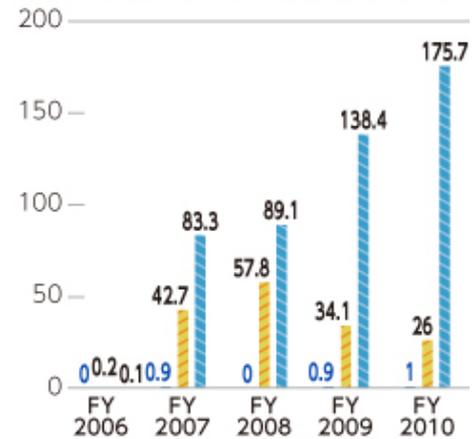
(The scope of tabulation was 14 NTT Communications Group companies in fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007 and fiscal 2006.)

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Reducing Environmental Impact Through Our Services

The NTT Communications Group employs ICT solutions to create and provide new value and collaborates with customers to lower society's overall impact on the environment. As a business, we offer environmental impact reduction solutions, which involve reducing the environmental impact of ICT itself, and we are also actively engaged in awareness-raising activities and provision of information, for example via websites.

Green ICT

Green ICT Initiatives

Green ICT involves aiming to reduce the environmental impact of ICT itself and utilizing ICT effectively to advance environmental impact reductions and environmental protection activities. Reducing the environmental impact of ICT itself is referred to as "Green of ICT," which specifically refers to initiatives for reducing negative environmental impact by reducing the power consumption of ICT systems and recycling resources. In contrast, utilizing ICT to reduce environmental impact and increasing positive impact on the environment is referred to as "Green by ICT," and includes measures such as improving the efficiency of transportation of people and goods.
NTT Communications applies both Green of ICT and Green by ICT approaches to its pursuit of "Green ICT."

Green ICT

"Green of ICT" and "Green by ICT"
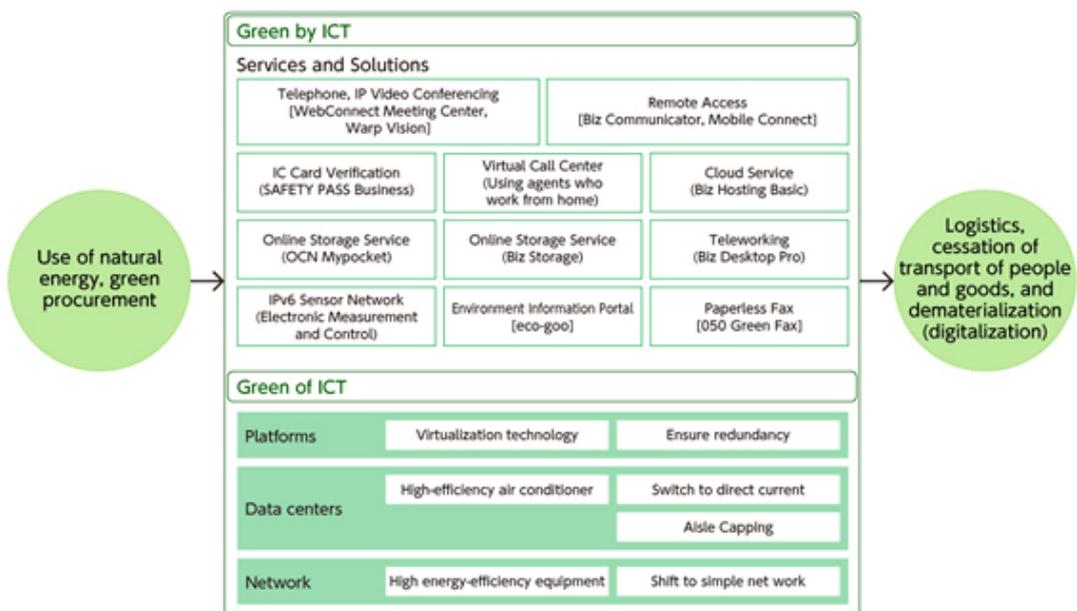
Providing Environmentally Friendly Services

Environmental Solutions Label System

The NTT Group is exploring the idea of an Environmental Solutions Label System for self-certification of environmentally friendly ICT solutions and services. To qualify, ICT solutions and services will have to achieve CO_2 reductions of at least 15%, as assessed through objective evaluation of environmental impact reduction benefits. The entire NTT Group provides these environmentally friendly services in order to help reduce the environmental impact caused by society.
In fiscal 2010, we registered five solutions, the details of which are described on the NTT BizLink website together with quantitative CO_2 reduction effects.

Environmental
Solutions Label

Click here for details on NTT BizLink's ICT solutions services.

Acquisition of the eco-ICT Mark

After performing self-assessment of our CO_2 reduction measures, we submitted an application in accordance with the ICT Ecology Guidelines created by the ICT Ecology Guideline Council * and acquired the eco-ICT Mark in July 2010.
In February 2010, the council created and published guidelines for appropriate CO_2 reduction measures to be implemented by telecommunications carriers, clearly defining the standards for procuring systems and data center services from the viewpoint of reducing power consumption.
Through participation in these efforts, NTT Communications is striving to reduce CO_2 emissions from the industry as a whole and involve Group Companies in these efforts in the future.

eco-ICT Mark

* ICT Ecology Guideline Council
The council was established on June 26, 2009 by the following five industry organizations: the Telecommunications Carriers Association, the Telecom Services Association, the Japan Internet Providers Association, the Communications and Information Network Association of Japan, and the ASP-SaaS Industry Consortium (a designated nonprofit organization).

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## Joint Trials with Government and Industry

IPv6 Environmental Cloud

NTT Communications conducted trials* of an IPv6 environmental cloud as a part of fiscal 2010 Ministry of Internal Affairs and Communications initiatives.
These trials involved centralized collection and management of energy information for multiple commercial buildings through a network utilizing IPv6 technology and cloud computing technology (the IPv6 environmental cloud). The results clarified what network conditions are required to build/operate an IPv6 environmental cloud, and the trial also studied what items applications need to reference in order to visualize the environmental impact reduction for buildings using the IPv6 environmental cloud.
In the future, people will be able to visualize building energy performance efficiently and conduct energy management to suit individual building usage conditions and system characteristics. We expect this to realize lower energy costs for building owners and tenants and reduced environmental impact.
We will continue to contribute to reducing society's impact on the environment and realizing a smart community.

* This trial was conducted in conjunction with building owners, building managers, and energy suppliers as a part of the fiscal 2010 Ministry of Internal Affairs and Communications initiative to contract trials of environmental cloud services (energy management/controls for building groups) that contribute to establishment of regional ICT system bases with reduced environmental impact.
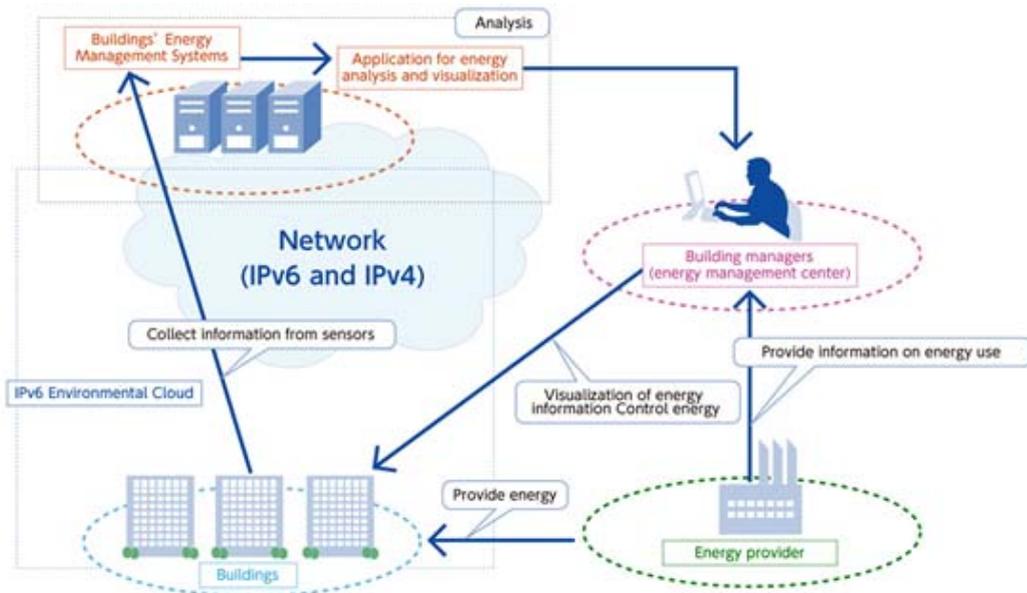
[Click here to view an enlarged diagram summarizing the IPv6 Environmental Cloud](#)

Development of Charge Platform for EV Sharing

The NTT Group developed a car-sharing system using electric vehicles (EV) from different makers, and started trials for analyzing commercial viability from March 2011.
EV car-sharing services require operations different from normal car-sharing, such as schedule considerations that take into account vehicle recharging time and management of recharging amounts. They also require recharging infrastructure. Therefore, this trial will aim to analyze the commercial viability of EV car-sharing among NTT group companies, as well as accumulate knowhow relating to introduction of EVs and peripheral infrastructure.
NTT Communications is participating in this trial by providing functions to bill users for EV usage (billing platform).
The trial is also considering tie-ups with various local governments, and we will continue contributing to the spread of EVs and recharging infrastructure towards realization of a low-carbon society.

Development of Environmental Solutions for Multi-store Chains

NTT Communications conducted a trial of environmental solutions, including visualization of electricity usage, targeting multi-store/multi-office corporations that became subject to energy conservation laws following revisions in April 2010. Electricity usage was reduced by more than 10% through this service's functions, such as visualization of energy consumption, optimization controls, information management at store facilities, and alert notices, confirming that this can contribute to energy conservation for customers.
We will continue to realize environmental solutions that utilize ICT and contribute to energy conservation for customers.
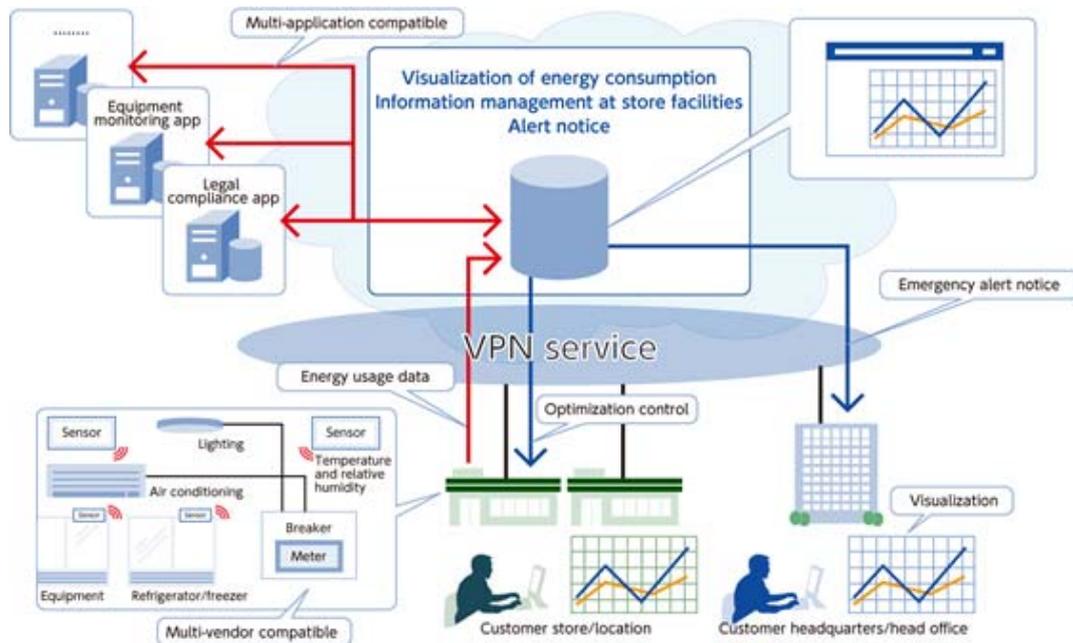
Click here to view an enlarged diagram summarizing NTT Communications' VPN Service

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Raising Awareness and Providing Information via the Web

goo Green Label Search Engine

We encourage participation in environmental protection activities through the use of the "goo Green Label" search engine, a service provided by NTT Resonant's "goo" web portal.
"eco-goo" is a comprehensive environmental information site that features information on daily living, corporate activities and international trends. We use the site to contribute to society through various events, including collaboration with other corporations and the "Environment goo Award," which marked its tenth anniversary.
The "goo Green Label" search engine donates part of the profits received from its services to organizations engaged in environmental and social protection activities. Since its inception in August 2007, the site has donated a total of 36 million yen to a total of 80 organizations (as of May 31, 2011). One part of this, the "Corporate Partner Program," enlists corporations that will promote "goo Green Label" usage internally, and 60 NTT Group companies and 28 other companies have signed up to date. A "Student Partner Program" has also been started up, expanding the program to high school and university students.
We also held an "Eco-Kids 2010" academic learning contest to have children think about the future of the earth's environment, which was met with 1,053 submissions from 89 schools nationwide. Award-winning entries were announced at an Eco-Products exhibition.
We plan to continue expanding the circle of participating users and provide platforms where more people can easily support environmental protection activities.

"eco-goo" site

goo Green Label Search Engine site

Green OCN

NTT Communications has started a "Green OCN Search Engine" as a service contributing to environmental protection activities from June 2010, based on the concept of "Environmentally Friendly Web Services."
"Green OCN Search Engine" donates a portion of revenues earned from sponsor ads shown on OCN search result screens to environmental protection groups tackling environmental problems. Donations totaled 1,010,736 yen through May 2011, and were donated to the Wild Bird Society of Japan and the international environmental NGO FoE Japan.
"Green OCN Search Engine" became "OCN Green Version" from July 2011, and will continue to broaden its services as a new type of Web service enabling users to participate in environmental protection activities.

Green OCN

Green Biz-IT

Green Biz-IT presents content related to the environment and is part of the Biz-IT website, which was developed with small to medium-sized corporations and independent proprietors in mind. NTT Communications provides information to these customers via Green Biz-IT to encourage their engagement in environmental protection actions.
Green Biz-IT presents the following information:
1. Explanation of current environmental issues in simple terms
2. Explanation of how environmental activities can lead to company growth
3. Introduction of simple environmental activities, including reduction of promotional costs by using the Internet and bottle cap collection to promote recycling and donate vaccines.
4. Introduction of environmental activities by Biz-IT personnel in blog format
5. Interviews with small to medium-sized enterprises engaged in environmental activities

Biz-IT

Green Biz-IT

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Promoting and Using Internal Green ICT

The NTT Communications Group actively uses in-house ICT to improve operational efficiency and reduce environmental impact.

Using In-house ICT to Reduce Environmental Impact

Using Thin Client Terminals to Reduce Transportation and Paper Usage

Using thin client terminals reduces power consumption through server sharing, which leads to reduced transportation and paper usage. Thin client terminals are also used to improve security since they are unable to store data.
As of March 31, 2011, approximately 6,600 NTT Communications employees were using thin client terminals for e-Work (working from home) while taking childcare leave, or for working from remote locations. Total usage in fiscal 2010 was around 1,000,000 hours, which was a reduction of 370 t-CO_2 compared to conventional methods.

Promoting Use of the Company's Internal Cloud

NTT Communications has internal ICT infrastructures that it uses to perform various operations necessary for providing OCN and VPN services, such as receiving customers' subscription applications, activating services, and maintenance. Since fiscal 2009, these internal ICT infrastructures have been migrated and integrated into a private cloud using server virtualization technology to cut costs, reduce environmental impact, and form a more robust business continuity plan.
In fiscal 2010, we migrated approximately 100 servers onto the private cloud, a move that we estimate will cut power consumption from these servers by about 50%.
Looking ahead, we plan to integrate our internal ICT infrastructures into the private cloud not only in Japan, but overseas as well. This is in step with our environmental protection initiatives and global expansion of our business.

Using Mobile Connect Service to Reduce Transportation

The Mobile Connect Service provided by NTT Communications enables users to remotely send and receive business emails and check their schedules by mobile phones. As of June 30, 2011, approximately 14,100 employees were using the Mobile Connect Service, achieving work that both reduces transportation and is friendly to the environment.

Using Video Conferencing to Reduce Transportation Needs

As a global company, the NTT Communications Group is actively utilizing video conferencing to reduce business trips and paper usage. In fiscal 2010, the average monthly usage was 598 times, up 6% and 53% from fiscal 2009 and fiscal 2008, respectively.

TOPICS Assessment by External Organizations

First Prize in the Communication Services Category of the Nikkei Environmental Management Survey

NTT Communications was awarded first place in the Communication Services Category of the 14th Nikkei Environmental Management Survey in fiscal 2010, for a second consecutive year. In order to meet our medium- and long-term goals, the entire NTT Communications Group will endeavor to strengthen measures for mitigating global warming, improve waste recycling rates and reduce paper usage.

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Site Data

Fiscal 2010 Plans, Reports and other Report Data on Measures against Global Warming

Act on the Rational Use of Energy (Energy Conservation Act)

▶ NTT Communications Regular Reports [PDF：1,006KB]

▶ NTT Communications Medium- to Long-term Reports [PDF：180KB]

Tokyo Metropolis

▶ NTT Communications Site 0924 [PDF：300KB]

▶ NTT Communications Site 0925 [PDF：266KB]

▶ NTT Communications Site 0926 [PDF：546KB]

▶ NTT Communications Site 0927 [PDF：540KB]

▶ NTT Communications Site 0928 [PDF：546KB]

▶ NTT Communications Site 1327 [PDF：361KB]

▶ NTT Communications Site 0564 [PDF：660KB]

Kanagawa Prefecture

▶ NTT Communications Kanagawa Building [PDF：237KB]

Yokohama City

▶ NTT Communications Yokohama Building [PDF：882KB]

Saitama Prefecture

▶ NTT Communications Saitama Building [PDF：952KB]

Nagoya Prefecture

▶ NTT Communications Nagoya A Building [PDF：1,345KB]

▶ NTT Communications Nagoya B Building [PDF：1,341KB]

Shizuoka Prefecture

▶ NTT Communications Shizuoka A Building [PDF：108KB]

Kyoto Prefecture

▶ NTT Communications Kyoto Building [PDF：166KB]

Kyoto City

▶ NTT Communications Kyoto [PDF：153KB]

Osaka Prefecture

▶ NTT Communications Osaka Building [PDF：876KB]

Hyogo Prefecture

▶ NTT Communications Hyogo Building [PDF：647KB]

Okayama Prefecture

▶ NTT Communications Okayama Building [PDF：190KB]

Hiroshima Prefecture

▶ NTT Communications Hiroshima Building [PDF：240KB]

Miyazaki Prefecture

▶ NTT Communications Miyazaki Building [PDF：90KB]

Kagoshima Prefecture

▶ NTT Communications Kagoshima Building [PDF：164KB]

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Respecting Our Employees

The NTT Communications Group respects employee diversity and provides workplaces that champion self-fulfillment based on our Basic CSR Policy. We maintain high ethical standards in meeting our social responsibilities as a telecommunications professional that offers services around the world.

▶ Human Resources Development and Evaluation

- Human Resources Development Policy
- Global HRM Initiative
- Training Systems
- Top Management Involvement in Training Programs
- Internal Job Posting System
- Personnel Evaluation

▶ Maintaining and Improving Employee Health

- Work-Life Committee
- Measures to Shorten Working Hours and Optimize Work Management
- Occupational Safety and Mental Healthcare
- Cafeteria Plan
- Supporting Volunteer Activities

▶ Respecting Human Rights

- Promoting Human Rights Education
- Maintaining a Business Structure that Respects Human Rights
- Human Rights Education
- Soliciting Human Rights as well as Regulatory Compliance and Ethics Slogans
- Experiential Learning

▶ A Workplace for Everyone

- Diversity Office
- Obtaining the "Kurumin" mark
- Supporting working women
- Helping Employees Fulfill Professional and Private Commitments
- Promoting working from home
- Employment of People with Disabilities
- Retaining Employees Who Reach Retirement Age

▶ Relationships with Employees

- Incorporating Employee Feedback
- Employees who Shine in Their Private Lives

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Human Resources Development and Evaluation

We are developing a personnel system where each individual can exhibit his/her personality and capabilities to the fullest, and are supporting the development of capabilities that enable employees to achieve self-fulfillment.

Human Resources Development and Evaluation

Human Resources Development Policy

We are implementing various measures based on our Human Resource Management (HRM) policy, which was unveiled in April 2006. With an emphasis on execution and teamwork (overall optimization), the policy aims to make NTT Communications a company where employees themselves demonstrate on-site capabilities while playing an active role in business operations. We aim for continuous improvement through a human resource development cycle. The cycle begins by defining ideal employees and desired skills. We then assess individual skills, and identify gaps between an individual's current skill level and that of ideal employees. Finally, we consider how to effectively assign job duties and develop a training plan to close the skill gap.
The implementation rate for our Professional Human Resources Development Program, a main pillar of our group's human resources development policy, reached virtually 100% in fiscal 2010, and has taken root as a system in the group, including overseas. We believe that a certain level of results has also been gained in raising employee skills and pushing them up into higher ranks. Going forward, we will continue to promote human resource development efforts based on the HRM policy, aiming to bolster corporate competitiveness through accelerated globalization. While continuing with our thinking that practical on-site experience is most effective, we will work on human resources development that leads to enhanced technical skills, in particular, towards realization of Vision 2015.

Global HRM Initiative

Diversity management is attracting attention as a means to utilize various concepts of values from a diverse workforce. We will have all Group companies work on HRM as a unit with a key message of "Global One Team" to promote global activity by human resources.
In the management training program started from fiscal 2009, 13 locally hired overseas employees were seconded to the head office and are involved in business in Japan. In fiscal 2010, human resource exchanges (training programs, etc.) were expanded between NTT Communications and overseas subsidiaries, and global communications training, pre-assignment training, and joint management training for NTT Communications and overseas subsidiaries were held as new training initiatives. An overseas assignment program for young employees was also started from July 2011. This is a program for developing employees who can succeed globally as soon as possible by dispatching new employees (in their first and second year) to on-site locations overseas.
Going forward, we will continue to aim for further expansion of global HRM initiatives through the development and assignment of managers at overseas subsidiaries, who will lead global business for the entire group, as well as promotion of global human resource exchanges.

Training Systems

We improve employee skills and encourage career development through an array of training programs.

We provide rotational training for new employees, mainly in business units that deal directly with customers. The goal here is to cultivate customer-oriented mindsets and encourage these employees to gain objective perspectives on individual operations.

After the junior training period, employees move to the professional human resources development program, where they discuss their career development plans (CDPs) with supervisors and choose courses accordingly.

After an employee has been with us for three years, we encourage their development as a professional human resource and their growth through real onsite experience based on employee CDPs. In fiscal 2009, we established the "Mid-Career Training" program for employees in their fifth year with the company who has reached the point where the promotion of hands-on mid-management experience is needed.

We strive to develop more practical and appropriate training content, while creating systematic training menus, partly based on employee survey results.

In fiscal 2010, a new training center (Chofu) was opened in December. Tools that can be used in diverse situations have been implemented in various locations, and being equipped with an environment for paperless, interactive training and video-conferences, the center will be used not only for training but also for lectures, conferences, and corporate events. Classrooms where training with actual equipment can be conducted for technical human resource training were also set up within the new training center. This has enabled training that was heretofore impossible, such as drills for building servers and routers, and operations manipulating actual equipment. Menus including practice on actual equipment have been added to skills enhancement training, expanding opportunities to learn practical skills that are closer to on-site situations.

Looking ahead, we will continue upgrading to a more practical training lineup that will lead to professional human resources development, and bolster in-house training where employees themselves will act as instructors to pass on knowledge and experience directly to the younger generation.

Overview of Training Programs
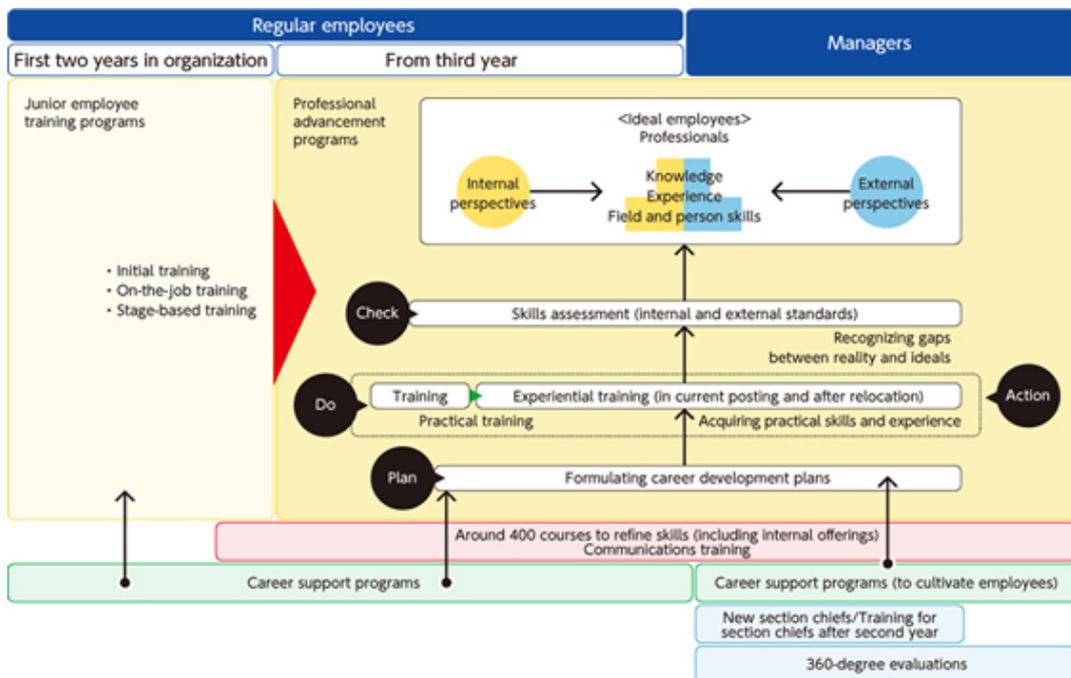
Number of Employees Trained

	January through December 2008	January through December 2009	January through December 2010
Employees undertaking group training	4,052	2,817	2,759
Employees trained at external facilities	2,827	2,762	3,125

(Scope: NTT Communications (non-consolidated))

Top Management Involvement in Training Programs

We also hold training classes for second-year employees, new section chiefs, new managers, and second-year managers' to provide opportunities to reflect upon what they have learned so far. We offer opportunities for our senior executives to participate in the trainings and discuss management issues directly with employees.

We widened coverage of rank-based training to the entire NTT Communications Group from fiscal 2010, and new manager training saw 120 new managers, including 24 belonging to group companies, participate. In addition to learning the knowledge and attitude required of managers, the final program of the training involved meetings with the president, with conversation themes ranging from the president's memories of when he became a section chief to the Group's current business strategy.

Going forward, we will promote active participation by senior management in training sessions, strive for mutual personnel exchanges for the entire Group, and conduct the horizontal rollout of various training and development initiatives.

Number of senior management members participating in education/training

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Meetings for Dialog Between Senior Management and Employees	12	12	15
Number of participants	817	833	2,081

(Scope: NTT Communications (non-consolidated) in fiscal 2008 and fiscal 2009; 19 NTT Communications Group companies in fiscal 2010.)

Internal Job Posting System

We have an internal job posting system that provides motivated employees with challenging opportunities to maximize their potential in a wide range of fields.

This is being widely used by employees of all ages, with job postings conducted within the NTT Communications Group and the NTT Group.

Job postings focused on the following points were conducted in fiscal 2010.

- Bolstering of Group companies towards maximization of total group power
- Postings aimed at bolstering global business
- Postings aimed at bolstering cloud-related services
- Postings aimed at bolstering upper layer-type services

We will continue to actively use this system to help employees advance their careers and to energize the organization, and also set up job postings in areas to be strengthened towards attainment of the business vision.

Employee transfers

	Fiscal 2008		Fiscal 2009		Fiscal 2010	
	Number of applications	Number of transfers	Number of applications	Number of transfers	Number of applications	Number of transfers
Within NTT Coms Group	40	19	9	3	40	20
To other NTT Group companies	163	69	132	54	168	48

(Scope: entire NTT Group)

Personnel Evaluation

To further motivate our employees, we introduced a performance evaluation and compensation system that values results. This system places importance on fairness and transparency, and does not tolerate discrimination of any kind, including, for example, gender-based discrimination. Accurately assessing employees' performance against their goals is a crucial aspect of this system. Therefore, after voluntarily setting their own goals and assessing their results, employees participate in semiannual performance review meetings with their supervisors to ensure agreement on the results of their job performance evaluation.

In April 2010, we revised our training program to develop truly capable workers by establishing a set training period for younger employees, and to better evaluate the duration of and enthusiasm for their challenges.

Number of Total Employees and New Employees by Gender

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Number of employees	8,360	8,350	8,150
Male	7,455	7,410	7,200
Female	905	940	950
New employees	201	196	215
Male	146	144	157
Female	55	52	58

(Scope: NTT Communications (non-consolidated), excluding seconded employees

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A Workplace for Everyone

NTT Communications is creating workplaces with diverse human resources where employees can truly harness their skills by drawing on individual attributes, values, and ideas.

Fostering Diversity

Diversity Office

In April 2008, NTT Communications established the Diversity Office in order to promote a business management strategy that utilizes the diversity of human resources, and implemented activities that centered on supporting the successful development of women in the workplace, promoting the hiring of people with disabilities and securing diversity.

In fiscal 2010, we focused on "bolstering team capabilities as a global company" in addition to our existing activities. Specifically, we put the Diversity Office in charge of raising awareness among all employees by working with the Global Human Resource Management (GHRM) team, which is undertaking various measures to promote the "Global One Team" concept. Using our Intranet, we disseminated content related to communication among different cultures and interviewed employees seconded from overseas units, representing diverse group of employees on the Intranet site.

We plan to continue rolling out initiatives to promote diversity on a global scale in the future.

In fiscal 2011, we will mainly promote work-style reforms after being selected as a "Tokyo model business for work-style reforms" by the Tokyo metropolitan government.

Obtaining the "Kurumin" mark

In April 2005, we launched a three-year action plan for childcare assistance and have been working to promote various initiatives to help our employees balance their professional and private lives. We received Kurumin mark certification in 2008 in recognition of our endeavors.

Thereafter, following a second action plan (April 1, 2008 to March 31, 2011), we have drawn up a third action plan (April 1, 2011 to March 31, 2015), toward creating a workplace environment where every employee can work happily, accepting and understanding diverse work styles.

Kurumin mark

From April 1, 2011, a new law required businesses with at least 101 employees to draw up and submit business owner action plans. NTT Communications Group companies subject to the requirement responded by drawing up and submitting various action plans in fiscal 2010.

We also newly instituted a "workplace return preparation seminar" for employees on childcare leave to reconfirm the system for returning and hold conversations with employees that have already returned to work.

Going forward, we will go beyond supporting the balancing of work and childcare, and consider measures with a career advancement theme, such as appealing to both individuals and their superiors regarding further career advancement (appointment to management positions, etc.) for employees in such situations.

Supporting working women

One role of the Diversity Office is to promote support for the successful development of women in the workplace. In particular, we carry out measures to support employees in balancing their professional lives with childcare and other demands by inviting visiting lecturers to hold childcare leave and work return support seminars, offering a variety of role models, and creating an internal cross-sectional communications network for female employees.

According to the results of a survey of all employees, it was discovered that female employees, in particular, felt confused when choosing among diverse careers since there were few role models they could relate to. Therefore, we listed female managerial role models on an Intranet site in fiscal 2010, supporting female employees in setting goals when choosing among diverse careers. Going forward, the NTT Communications

Seminar on childcare leave and work return support

Group will roll out joint initiatives, working on further career development support for women. Joint group training for female career development was also held as an NTT Group initiative. Several NTT Communications employees also participated as representatives in seminars with guest speakers, panel discussions with older NTT Group employees, and self-reflection over four months. We are continuing our activities toward the creation of the next generation of female leaders for the overall NTT Group.
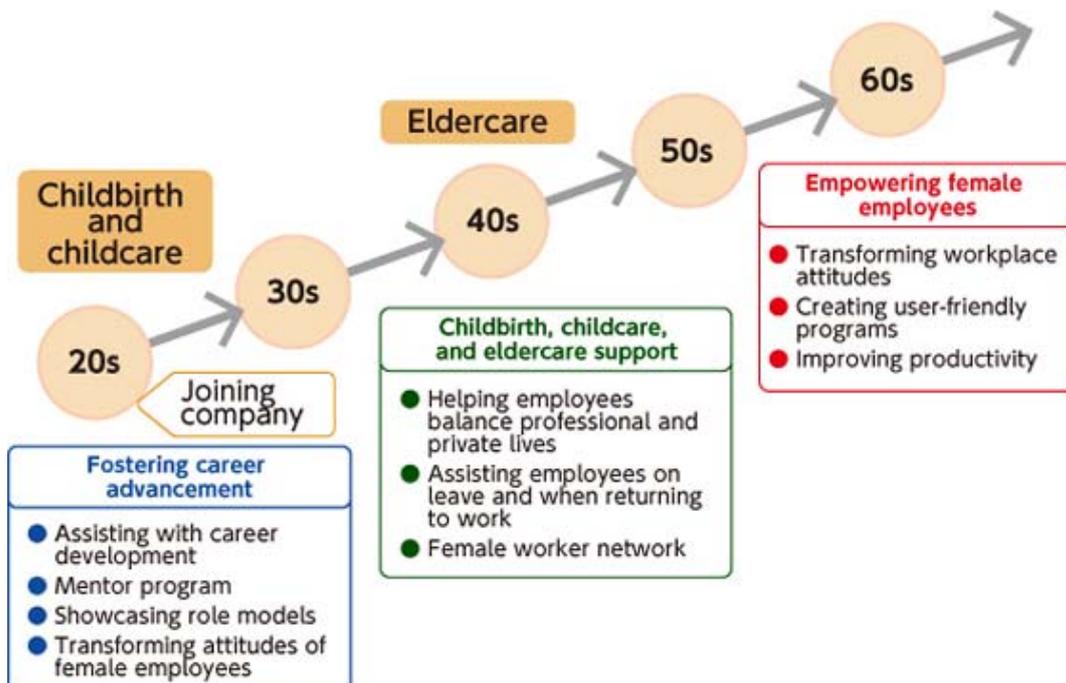
Number of female managers (manager and above)

Fiscal 2008	Fiscal 2009	Fiscal 2010
67 (2.9%)	74 (3.1%)	71 (3.2%)

(Scope: NTT Communications (non-consolidated), including seconded employees)

Strategic initiatives for female employees

Helping Employees Fulfill Professional and Private Commitments

To make sure that having a child or caring for children or elderly relatives does not interfere with career development, we established a system of vacations, leaves, and shortened workweeks to help employees balance their professional and private commitments. We also conducted various awareness-raising activities to foster workplaces where people feel easily able to take advantage of these systems.

A ?Communication Handbook? was planned and issued by the NTT Group in March 2009, and NTT Communications distributed this to all employees. The contents deepen mutual understanding of diverse work styles suited to life stages through smooth communication between superiors, the workplace and individuals.

In fiscal 2010, we again utilized the NTT-LiFE+ childcare/eldercare support site for employees to disseminate information about systems and share experiences of using them. This site can be accessed from home by employees on childcare leave to obtain information, and also responds to the needs of employees preparing to return to the workplace. In addition to our system for re-hiring employees who had resigned to focus on childcare, we introduced a system for re-hiring those who had resigned due to spouse's work transfers, or similar reasons.

In fiscal 2011, this will be expanded to men and young employees that will be involved in childcare in the future, with further measures taken to support the balancing of childcare and careers.

Overview of Support Programs and User Numbers

Program	Overview	Number of users		
		Fiscal 2008	Fiscal 2009	Fiscal 2010
Maternity leave	From 6 weeks before and 8 weeks after childbirth	49	59	68
Childcare leave	Leave for up to 3 years after childbirth	109 (including 2 men)	140	129 (including 6 men)
Special working system to assist childcare	4, 5, or 6 hour workday to accommodate childcare until the end of the school year in which the child reaches the age of 8 (until end of the third year of elementary school)	120	149 (including 2 men)	145
Eldercare leave	To care for elderly family members, employees may take leave of up to 93 days as designated by law, plus an additional 15 months under company rules for care of the same person	3 (including 3 men)	2 (including 1 men)	4 (including 4 men)
Reduced working hours for eldercare	To care for elderly family members, employees may work reduced hours for up to 93 days as designated by law and work for only 4, 5, or 6 hour a day for up to 33 months under company rules for care of the same person	5	0	1

(Scope: NTT Communications (non-consolidated))

Promoting working from home

In August 2007, the e-work (working from home) system was introduced as a way of balancing work and home life. The system enables employees that need to take care of children or family members to be provided with Company "thin client" computers up to two days a week. A cumulative total of around 200 employees have made use of this system since its first season.

A look at e-work

We will continue to make efforts going forward so that
employees can choose diverse working styles.

Employment of People with Disabilities

With our emphasis on diversity in the workplace, we have taken steps to promote hiring of people with disabilities.
In fiscal 2010, we implemented follow-up measures after hiring and initiatives to improve all employees' understanding of people with disabilities, as in the previous year. We also coordinated Group hiring to reach the statutory hiring ratio for people with disabilities of 1.9%. New initiatives included follow-up interviews of people who had worked less than three years at the company and seminars on supporting network-building for employees with disabilities, to encourage exchanges and problem-solving among employees.

Retaining Employees Who Reach Retirement Age

We introduced the Career Staff System, which allows employees reaching the mandatory retirement age of 60 to continue working if they wish, until they reach 65.

Number of rehired employees

Fiscal 2008	Fiscal 2009	Fiscal 2010
36	56	60

(Scope: NTT Communications (non-consolidated))

CSR Report 2011

Maintaining and Improving Employee Health

We strive to provide a safe and secure work environment where employees can work in a healthy manner.

Balancing Work and Home Lives

Work-Life Committee

The Work-Life Committee was established to create more satisfying workplaces and help employees improve the balance between their professional and private lives. The committee comprises management and employee representatives, who make a continual effort to implement a range of measures aimed at achieving the goals of decreasing annual total work time, and thorough control of working hours.
One example is the Work Hours Survey conducted for all employees to assess such aspects as their feelings about their control of working hours, and how easy it is to take time off. The responses were used in formulating the measures of the Work-Life Committee.
During fiscal 2010, the committee conducted awareness activities that included sending out regular electronic newsletters to all employees, and sponsoring seminars by experts for general employees.

Measures to Shorten Working Hours and Optimize Work Management

To properly manage the status of overtime, we encourage daily confirmation of working hours through communication between managers and employees. This helps to raise employee awareness regarding overtime, and prevent instances of unpaid overtime.
From the standpoint of preventing overwork and to help employees maintain their health, Wednesdays are designated as "no overtime" days. We are also working to shorten total working hours by enhancing the transparency of the overtime situation in each workplace, and designating days on which employees are encouraged to systematically take leave.
These measures help us to achieve the goal of decreasing annual total working hours.

Occupational Safety and Mental Healthcare

We are implementing various measures to secure occupational safety based on creating work environments that ensure the health and safety of our employees.
We are training "mental health keepers" whose role is to tend to employee mental health on the job so that employees can work in a stress-free environment. We also offer various other services on a continual basis, including counseling for high-risk employees and employee consultation desks provided inside and outside the organization in addition to "stress-check corners."
In fiscal 2010, 473 employees were certified as mental health keepers, bringing the total number to 1,416. Nearly all section heads have completed the training. Approximately 500 employees with poor mental health or in high-risk groups received counseling.
Going forward, we will continue to implement various measures to ensure healthy and comfortable work environments. We will also expand measures to group companies in Japan, and enhance counseling services for employees on overseas assignments.

Number of Work-related Accidents (while working or commuting)

Fiscal 2008	Fiscal 2009	Fiscal 2010
1 (working 0 / commuting 1)	6 (working 1 / commuting 5)	1 (working 0 / commuting 1)

(Scope: NTT Communications (non-consolidated))

Cafeteria Plan

We offer various benefits to all employees equally throughout their time in our organization to cater to varying lifestyles and needs.
Our "cafeteria plan" provides extensive "menu" options, and we also provide life design education and consultation.
In fiscal 2010 we offered 49 "menu" items, as in the previous fiscal year. A total of 136 employees attended life design seminars, and 203 employees received consultations.
We will continue enhancing our programs and "menus" to make them employee-friendly.

Supporting Volunteer Activities

We believe that being exposed to a variety of value systems inside and outside the workplace will help vitalize both our employees and our corporation. We therefore instituted a volunteer leave system that has been in place since the early days of the Company, and we encourage employees to utilize it for volunteer activities.

Number of Employees Using Our Volunteer Leave System

Fiscal 2008	Fiscal 2009	Fiscal 2010
74	65	84

(Scope: NTT Communications (non-consolidated))

CSR Report 2011

Relationships with Employees

- ▶ [Human Resources Development and Evaluation](#) ▶ [A Workplace for Everyone](#)
- ▶ [Maintaining and Improving Employee Health](#) ▶ **Relationships with Employees**
- ▶ [Respecting Human Rights](#)

We aim to provide a workplace that promotes an atmosphere of openness and high employee motivation by encouraging communication between employees.

Creating More Satisfying Workplaces

Incorporating Employee Feedback

We communicate closely with employees because we seek to build a pleasant and motivating corporate culture. Our goal is to swiftly reflect ideas from employees in management and business processes by enabling them to feel free to send proposals directly to us.

As part of that commitment, we launched the Kaizen (Continuous Improvement) Office in July 2006. We also instituted a Direct Line program for dealing with constructive proposals from employees beyond organizational and supervisory boundaries. In May 2011, we made it easier to submit proposals by changing the submission format to require only identification of a problem with a business process, without necessarily requiring an improvement plan. We also changed the name to Kaizen Support Line.

The proposals and the status of the solutions can be viewed on the Kaizen Portal on the company intranet. In fiscal 2008, we instituted the Kaizen awards system to encourage more proposals and to recognize both those who submit outstanding proposals and those who implement them.

We received around 510 proposals through the end of May 2011. We will continue to ensure an environment that increases opportunities for employees to voice their concerns, and in which a wide variety of ideas are reflected in business process improvements in a timely manner.

As a means to support and improve employee motivation, we also conduct surveys to gain an understanding of the actual conditions surrounding the degree of implementation of the daily habits of employees, as well as their attitudes toward work and the workplace. We use the survey results to establish a range of measures to help support and improve employee motivation.

Employees who Shine in Their Private Lives

In fiscal 2009, we launched the "Shining Sha-in (Experts in their Private Lives)" project. We wanted to use this to create more opportunities for communication and get to know each other better by introducing the enthusiastic pursuits of employees outside of work, such as their hobbies, talents or special interests.

As a result, we received roughly 400 entries including those from overseas subsidiaries and Group Companies. The project has been published in a booklet, on the intranet, and contributes to building an open corporate culture.

Intranet (in English)
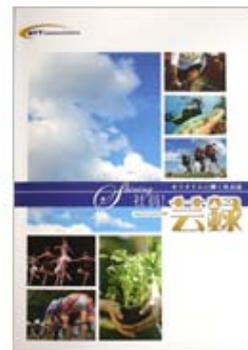
Booklet

CSR Report 2011

Respecting Human Rights

We strive to build a corporate culture based on high ethical standards and offer a non-discriminatory workplace where people respect diversity and individuality.

Respecting Ethics and Human Rights

Promoting Human Rights Education

As a global corporation, the NTT Communications Group considers one of its missions to be creating a corporate culture that respects human rights, and works to solve human rights-related problems, including discrimination of any kind. To ensure that our corporate culture does not engage in, cause, or tolerate discrimination, one of our basic policies is to solve human rights issues through our daily business activities.

The Human Rights Awareness Committee, which was established to help promote human rights education, performs a range of activities including reporting on educational activities and discussing promotional measures. From fiscal 2009, we have been strengthening our group ties by having employees who are responsible for promoting human rights in Group Companies also acting as members of the Committee.

Maintaining a Business Structure that Respects Human Rights

Human rights are a vital focus for NTT Communications. We aim to maintain a corporate structure that abhors discrimination and fosters bright and energetic workplaces. We treat our regular employees and temporary staff equally, out of trust and respect for diversity and individuality. We work to raise human rights awareness by issuing a monthly in-house e-newsletter that highlights examples of workplace harassment tied to seasonal events, among other related issues.

Human Rights Education

All regular and temporary employees of the NTT Communications Group must attend classes on human rights in the workplace at least once annually. Participants gain basic knowledge about discrimination and how to prevent it. Directors and executives attend an annual class on discrimination and other human rights issues. Such classes heighten their awareness of discrimination and foster a corporate culture that does not engage in, cause, or tolerate discrimination. These classes also facilitate various workplace improvements (management-related). Notably, in fiscal 2010, almost all overseas subsidiaries implemented classes on human rights.

In the area of sexual and power harassment, we have invited an external expert to give an annual class on harassment each year since fiscal 2000. We distribute a monthly e-newsletter to all regular and temporary employees that highlights examples of workplace harassment in an effort to raise awareness about the issue.

We will continue to heighten employee awareness of human rights issues through such educational programs. Through these efforts, we strive to develop workplaces that do not tolerate harassment, as we foster human rights awareness to promote respect for diversity and acceptance of differences. We will thus continue working to develop even brighter and more energetic workplaces.

Participants in Human Rights Programs

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Classes on harassment	182	182	216
Classes on human rights in the workplace	19,774	18,302	19,516
Human rights issues classes for senior managers	46	46	50

(Scope: 12 domestic companies of the NTT Communications Group)

Soliciting Human Rights as well as Regulatory Compliance and Ethics Slogans

We solicit human rights as well as regulatory compliance and ethics slogans every year to increase understanding of human rights issues.

A total of 26,566 entries from 10,000 people, an all-time high, were submitted in fiscal 2010. The top prize-winning slogan was: "Pass on the baton with a smile. / You are the first runner." The slogans are collected from all Group employees, including employees of overseas subsidiaries, temporary employees and their family members. In fiscal 2010, a particularly large number of submissions were received from employees of overseas subsidiaries and their family members.

Human rights and regulatory compliance and ethics memo pad

Human rights and regulatory compliance and ethics calendar

We hope to increase understanding of human rights by publishing the best slogans on calendars and memo pads, then making them available in every workplace so that employees have something close at hand to remind them of human rights.

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Experiential Learning

We conduct an annual experiential learning program to deepen employee understanding of persons with disabilities and the elderly. Employees wear eyeshades, move around in wheelchairs, and simulate the experiences of old age. In fiscal 2010, we held this program on February 14, 18, and 21.

Many participants spoke about how meaningful the experiential learning experience was: "It was a most worthwhile experience. I discovered many new things I never would have in my everyday life". "It made me realize

Wearing eyeshades

how important sight really is. I learned more from experiential learning than I would have in a class." "People who don't have a disability might think they understand, but to truly understand you really have to experience it".

In fiscal 2010, participants also spoke directly with people with disabilities about various issues, such as inconveniences in daily life and any requests they may have for non-disabled persons. Through these conversations, participants increased their understanding of people with disabilities.

Participants in Our Experiential Learning Program

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Eyeshades	44	40	42
Moving around in wheelchairs and simulating the experiences of old age	42	39	43

(Scope: NTT Communications (non-consolidated))

CSR Report 2011

About this report

Information about NTT Communications Group's approach toward compiling and publishing the report, and supplemental data and information for the current fiscal year

▶ Editorial Policy
Information about our policy and approach toward creating the booklet and online editions, our methodology for choosing key information to report, and a profile of the report.

▶ Third-Party Opinion
An opinion from Sachiko Kishimoto, Executive Director of the Center for Public Resources Development.

▶ GRI Guidelines Contrast Table
An index and a table allowing readers to compare the guidelines we followed with those of the Global Reporting Initiative's Sustainability Reporting Guidelines (Version 3.0)

▶ Environmental Reporting Guidelines Contrast Table
An index and a table comparing the guidelines we followed with those from the Japanese Ministry of the Environment's Environmental Reporting Guidelines (Fiscal Year 2007 Version).

CSR Report 2011

Editorial Policy

As a Global ICT partner, the NTT Communications Group conducts CSR activities with the aim of contributing to community prosperity and sustainability worldwide by creating new value and resolving problems through provision of telecommunications services. We have issued this report to clearly convey our CSR approach and activities to our stakeholders.

The English version of this report is based on a two-part electronic format comprising an abridged version and a detailed version. We aim to provide information effectively by remaining aware of the readers envisioned for this type of report.

We are also dedicated to improving accuracy and thus use "we" when reporting on the entire NTT Communications Group, and use company names when reporting on NTT Communications or Group companies.

The information provided in this report has been assigned a Self-Declared B Application Level under the GRI's Sustainability Reporting Guidelines. Going forward, we intend to continue enhancing the report's content.

Abridged Version

The abridged version summarizes the content of the detailed version by presenting the NTT Communications Group's more important CSR activities in a clear, straightforward manner to the general public.

Detailed Version

The detailed version presents numerous specific examples of the NTT Communications Group's CSR activities, through a comprehensive look at concrete CSR activities and detailed data.

Focus of Report Content by Version
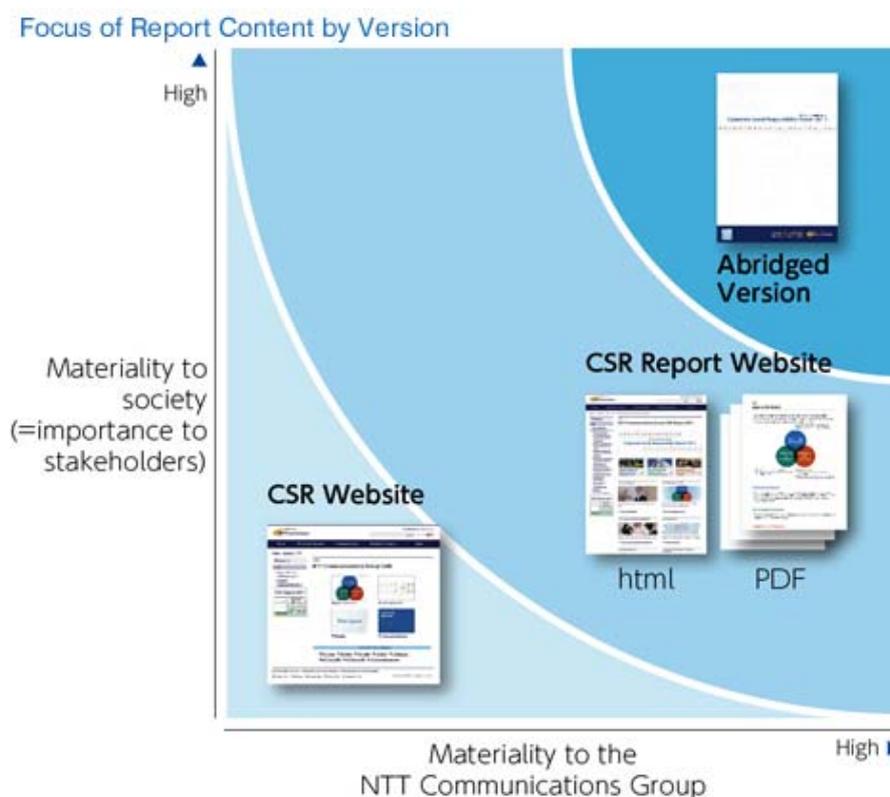
Selection of Material Issues and Other Items for Disclosure

We used the two-stage selection process described to the right to provide a well-balanced presentation of material issues and other items, in terms of their importance for the Group, as well as requests from society and the need for disclosure from all stakeholders. In the process, we referred to the materiality requirements of Version 3 of the Global Reporting Initiative's Sustainability Reporting Guidelines and other publications.

We present information with a high degree of materiality in the booklet and all other information in the online version of the report, according to the results of the selection process. In this manner, the printed and online versions of the report are differentiated to make the most of the features of these media.

In response to the issuance of the ISO 26000 standard, we have sought to improve how we explain our contribution to society as a global corporate group and the penetration of CSR within our organization in the 2011 version of the report. Another priority was to actively disclose information about our response to the Great East Japan Earthquake.

Two-Stage Selection Process

Stage 1: Determine issues and other items that should be considered for disclosure from the following:

- Traditional disclosure items reflecting GRI's Sustainability Reporting Guidelines
- Issues disclosed by peer companies, and various companies in peripheral business sectors
- Issues attracting growing interest following the issuance of ISO 26000

Stage 2: Select disclosure items from the following six perspectives

- Issues relating to ongoing CSR impacts, risks, and opportunities identified through surveys by expert individuals and organizations specializing in CSR
- CSR issues of significant social interest that the media frequently covers
- Issues that interest stakeholders (in employee and customer surveys and through other initiatives)
- Key organizational issues, notably those relating to our management philosophy, Basic CSR Policy, and Our Business Principles
- Regulatory and voluntary agreement issues covering our organization and operations, notably the Telecommunication Business Law and the rules of the Telecommunications Carriers Association
- Important issues relating to other companies, particularly competitors and companies with outstanding CSR programs

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Report Profile

Reference Guidelines

GRI (Global Reporting Initiative)
Version 3.0 of the GRI's Sustainability Reporting Guidelines
The Ministry of the Environment's Environmental Reporting Guidelines (Fiscal Year 2007 Version)
The Ministry of the Environment's Environmental Accounting Guidelines 2005
ISO26000：2010, Guidance for social responsibility

* Report compliance with the GRI's Sustainability Reporting Guidelines and Environmental Reporting Guidelines is disclosed in the online version.

Third-Party Opinion

Each year we have an independent expert provide an opinion to help us improve our CSR activities. Sachiko Kishimoto, Executive Director of the Center for Public Resources Development (NPO), kindly provided her opinion for the 2011 edition of the report.

Click here for details on Third-party opinion.

Report Scope

This report covers organizations important to reporting on CSR activities, namely NTT Communications and Group companies, based on the Group's Basic CSR Policy. However, any reporting outside this scope is indicated separately.

Period Covered

Fiscal 2010: April 1, 2010 to March 31, 2011
(some content may fall outside this timeframe)

Issue Dates

This report: November 2011
(Previous edition: November 2010; Next report: Scheduled for November 2012)

CSR Report 2011

Third-Party Opinion

Third-Party Opinion

Sachiko Kishimoto
Executive Director of the Center for Public Resources Development

Ms. Kishimito graduated from the Department of Liberal Arts in the College of Arts and Sciences at The University of Tokyo. She worked at the research institute of a private corporation before taking up her present post in 2000. Her focus is socially responsible investment, corporate social responsibility, and the theory of non-profit organizations. Ms. Kishimoto is also an adjunct lecturer at the Rikkyo University Graduate School and Yokohama National University Graduate School.

Following on from the previous year, I herein provide a third-party opinion on the information disclosed in NTT Communications' CSR Report 2010 and on its website.

The essence of CSR lies in dialogue with society. In this sense, the public nature of corporations has never been scrutinized as closely as in the past year. The Great East Japan Earthquake and the ensuing nuclear power plant breakdown have brought the very foundations of our socioeconomic system into question. These times have thrown into stark relief the sensitivity of corporations to society's requests, particularly in terms of how they address societal issues in times of crisis.

There has been an increasingly pressing need for further power conservation efforts following the Great East Japan Earthquake. NTT Communications has vowed to step up power conservation efforts through ICT, while pitching new business models and lifestyles like telecommuting and remote access, through the provision of innovative ICT services. These are key priorities at present and are highly commendable as a strategy for promoting CSR through core operations. Looking ahead, I hope that NTT Communications will promote these measures further by making energy conservation benefits at its customers more visible through specific examples with quantitative figures and in other ways.

NTT Communications' technological abilities can also be applied to solving social issues facing developing countries. One pioneering example is the YMC-Viet Project (an initiative to provide communication systems to improve agricultural productivity in Vietnam), which is highlighted on the CSR website. I hope that NTT Communications, as a company with global business aspirations, will continue to conduct projects that address social issues in the regions it enters, in cooperation with NGOs and other partners well-versed with the situation on the ground.

Last year, I discussed setting annual targets for CSR indices and providing self-evaluations for the levels achieved towards these targets. Beginning with this fiscal year, NTT Communications has defined CSR Priority Activities, narrowed down activities to specific initiatives, and set targets. I commend these improvements. In regard to the environment, Key Performance Indicators (KPIs) have been established and disclosed. Looking ahead, I believe that extending such improvements to areas like workforce diversity would be another step in the right direction. I hope that the Company will establish numerical targets for such parameters as the appointment of women to management positions, and report on its progress. I would also like to see NTT Communications establish specific numerical targets for and report on progress on improving working conditions, for example reducing the total number of working hours a year, and enforcing strict management of working hours.

There are two particular areas in which I strongly hope that NTT Communications will take action. The first area is to enhance dialogue with stakeholders. As I said at the beginning, the essence of CSR lies in dialogue with society. Because information will become a lifeline for tomorrow's society, NTT Communications' business will have an extremely large impact on society. NTT

Communications' CSR Priority Activities are very well defined from the standpoint of the Company. Going forward, I hope that it will identify specific stakeholders and regularly engage in dialogue with them, in order to directly hear requests from society and reflect them in business activities. Let me stress that this type of dialogue will be crucial to enhancing the Company's CSR activities going forward.

The second area is to upgrade and expand the scope of the Company's social contribution activities. Traditionally, NTT Communications' activities in this area have included community beautification programs and the Ecocap Movement of collecting and selling used plastic bottle caps to fund vaccines. These activities are certainly praiseworthy in the sense that they encourage employee participation, but they do not take full advantage of the Company's unique characteristics. In contrast, a group of employee volunteers from NTT Communications recently utilized ICT to assist with the exchange of information in regions devastated by the Great East Japan Earthquake as part of the Company's support for the disaster recovery effort. I hope that NTT Communications will continuously carry out such employee-led initiatives that make the most of employees' insight and specialized expertise. In this way, I hope that NTT Communications will continue to contribute to society in a manner that makes "the face of the company" visible to society.

CSR Report 2011

GRI Guidelines Contrast Table

▶ Editorial Policy   ▶ Third-Party Opinion   ▶ **GRI Guidelines Contrast Table**
▶ Environmental Reporting Guidelines Contrast Table

G3 Disclosure	Description	Reported Information
1 Strategy and Analysis		
1.1	Statement from the most senior decisionmaker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	·Top Commitment
1.2	Description of key impacts, risks, and opportunities.	·Top Commitment ·Our Approach to CSR
2 Organizational Profile		
2.1	Name of the organization.	·Corporate Information ·Business Overview
2.2	Primary brands, products, and/or services.	·Corporate Information ·Business Overview
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	·Corporate Information ·Business Overview
2.4	Location of organization's headquarters.	·Corporate Information ·Business Overview
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	·Corporate Information ·Business Overview
2.6	Nature of ownership and legal form.	·Corporate Information ·Business Overview
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	·Corporate Information ·Business Overview
2.8	Scale of the reporting organization, including: ·Number of employees; ·Net sales (for private sector organizations) or net revenues (for public sector organizations); ·Total capitalization broken down in terms of debt and equity (for private sector organizations); and ·Quantity of products or services provided.	·Corporate Information ·Business Overview
2.9	Significant changes during the reporting period regarding size, structure, or ownership including: ·The location of, or changes in operations, including facility openings, closings, and expansions; and ·Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations).	Not applicable

2.10	Awards received in the reporting period.	Assessment by External Organizations
3 Report Parameters		
Report Profile		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	·Report Profile
3.2	Date of most recent previous report (if any).	·Report Profile
3.3	Reporting cycle (annual, biennial, etc.)	·Report Profile
3.4	Contact point for questions regarding the report or its contents.	·Back Cover
Report Scope and Boundary		
3.5	Process for defining report content, including: ·Determining materiality; ·Prioritizing topics within the report; and ·Identifying stakeholders the organization expects to use the report.	·Editorial Policy
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	·Report Profile
3.7	State any specific limitations on the scope or boundary of the report.	·Report Profile
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	·Report Profile
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	·Report Profile
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).	·Report Profile
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	·Report Profile
GRI content index		
3.12	Table identifying the location of the Standard Disclosures in the report.	This table
Assurance		
3.13	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).	·Third-Party Opinion
4 Governance, Commitments, and Engagement		
Governance		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	·Corporate Governance
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	·Corporate Governance
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	·Corporate Governance

4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	·Corporate Governance
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	·Corporate Governance
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	·Corporate Governance
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	·Corporate Governance
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	·Our Approach to CSR
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	·Corporate Governance
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	·Corporate Governance
Commitments to External Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	·Business Risk Management
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	·Special Feature on Biodiversity on the "eco-goo" Portal ·Acquisition of the eco-ICT Mark
4.13	Memberships in associations (such as industry associations)and/or national/international advocacy organizations in which the organization: ·Has positions in governance bodies; ·Participates in projects or committees; ·Provides substantive funding beyond routine membership dues; or ·Views membership as strategic.	·Corporate Information ·Business Overview
Stakeholder Engagement		
4.14	List of stakeholder groups engaged by the organization.	·Our Approach to CSR
4.15	Basis for identification and selection of stakeholders with whom to engage.	·Our Approach to CSR
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	·Faithfully Serving Our Customers ·Our Relationship with Society ·Our Relationship with Suppliers ·A Workplace for Everyone ·Respecting Human Rights

4.17		Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	·Improving Customer Satisfaction ·Relationships with Employees
5 Management Approach and Performance Indicators			
Economic			
		Disclosure on Management Approach	·Top Commitment
aspect: Economic Performance			
EC1	CORE	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	·Financial Information ·CSR Index 2011
EC2	CORE	Financial implications and other risks and opportunities for the organization's activities due to climate change.	-
EC3	CORE	Coverage of the organization's defined benefit plan obligations.	-
EC4	CORE	Significant financial assistance received from government.	-
aspect: Market Presence			
EC5	ADD	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	-
EC6	CORE	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	·Our Relationship with Suppliers
EC7	CORE	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	-
aspect: Indirect Economic Impacts			
EC8	CORE	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	·Reliably and Securely Bridging the World ·Maintaining Stable and Reliable Telecommunications Services ·Information Security in Telecommunication Services ·Our Relationship with Society
EC9	ADD	Understanding and describing significant indirect economic impacts, including the extent of impacts.	·Top Commitment ·Business Risk Management
Environmental			
		Disclosure on Management Approach	·Basic Philosophy and Environmental Management

aspect: Materials			
EN1	CORE	Materials used by weight or volume.	·Environmental Impact of Business Activities
EN2	CORE	Percentage of materials used that are recycled input materials.	·Environmental Impact of Business Activities
aspect: Energy			
EN3	CORE	Direct energy consumption by primary energy source.	·Global Warming Prevention
EN4	CORE	Indirect energy consumption by primary source.	·Global Warming Prevention
EN5	ADD	Energy saved due to conservation and efficiency improvements.	·Global Warming Prevention
EN6	ADD	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	·Global Warming Prevention
EN7	ADD	Initiatives to reduce indirect energy consumption and reductions achieved.	·Global Warming Prevention
aspect: Water			
EN8	CORE	Total water withdrawal by source.	·Environmental Impact of Business Activities
EN9	ADD	Water sources significantly affected by withdrawal of water.	-
EN10	ADD	Percentage and total volume of water recycled and reused.	-
aspect: Biodiversity			
EN11	CORE	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	·Biodiversity Conservation
EN12	CORE	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	-
EN13	ADD	Habitats protected or restored.	-
EN14	ADD	Strategies, current actions, and future plans for managing impacts on biodiversity.	·Basic Philosophy and Environmental Management ·Biodiversity Conservation
EN15	ADD	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	-
aspect: Emissions, Effluents, and Waste			
EN16	CORE	Total direct and indirect greenhouse gas emissions by weight.	·Environmental Impact of Business Activities
EN17	CORE	Other relevant indirect greenhouse gas emissions by weight.	·Environmental Impact of Business Activities

EN18	ADD	Initiatives to reduce greenhouse gas emissions and reductions achieved.	·Bridging to Reduce Environmental Footprint ·Global Warming Prevention
EN19	CORE	Emissions of ozone-depleting substances by weight.	·Prevention of Environmental Pollution
EN20	CORE	NOx, SOx, and other significant air emissions by type and weight.	·Prevention of Environmental Pollution
EN21	CORE	Total water discharge by quality and destination.	-
EN22	CORE	Total weight of waste by type and disposal method.	·Reduction of Waste
EN23	CORE	Total number and volume of significant spills.	-
EN24	ADD	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	-
EN25	ADD	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	·Biodiversity Conservation
aspect: Products and Services			
EN26	CORE	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	·Reducing Environmental Impact Through Our Services
EN27	CORE	Percentage of products sold and their packaging materials that are reclaimed by category.	-
aspect: Compliance			
EN28	CORE	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	·Prevention of Environmental Pollution
aspect: Transport			
EN29	ADD	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	·Bridging to Reduce Environmental Footprint ·Global Warming Prevention
aspect: Overall			
EN30	ADD	Total environmental protection expenditures and investments by type.	·Environmental Accounting
Labor Practices and Decent Work			
		Disclosure on Management Approach	·Human Resources Development and Evaluation ·A Workplace for Everyone ·Maintaining and Improving Employee Health ·Relationships with Employees ·Respecting Human Rights

aspect: Employment				
LA1	CORE	Total workforce by employment type, employment contract, and region.		·Corporate Information ·Business Overview ·Using Global Capabilities to Bridge
LA2	CORE	Total number and rate of employee turnover by age group, gender, and region.		-
LA3	ADD	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		·Maintaining and Improving Employee Health
aspect: Labor/Management Relations				
LA4	CORE	Percentage of employees covered by collective bargaining agreements.		-
LA5	CORE	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.		-
aspect: Occupational Health and Safety				
LA6	ADD	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.		-
LA7	CORE	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.		·Maintaining and Improving Employee Health
LA8	CORE	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.		·Maintaining and Improving Employee Health
LA9	ADD	Health and safety topics covered in formal agreements with trade unions.		-
aspect: Training and Education				
LA10	CORE	Average hours of training per year per employee by employee category.		·Human Resources Development and Evaluation
LA11	ADD	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		·Human Resources Development and Evaluation
LA12	ADD	Percentage of employees receiving regular performance and career development reviews.		·Human Resources Development and Evaluation
aspect: Diversity and Equal Opportunity				
LA13	CORE	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.		·Using Global Capabilities to Bridge ·A Workplace for Everyone
LA14	CORE	Ratio of basic salary of men to women by employee category.		·Personnel Evaluation

Human Rights			
		Disclosure on Management Approach	·Respecting Human Rights
aspect: Investment and Procurement Practices			
HR1	CORE	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	-
HR2	CORE	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	-
HR3	ADD	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	·Respecting Human Rights
aspect: Non-Discrimination			
HR4	CORE	Total number of incidents of discrimination and actions taken.	-
aspect: Freedom of Association and Collective Bargaining			
HR5	CORE	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	-
aspect: Child Labor			
HR6	CORE	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	Not applicable
aspect: Forced and Compulsory Labor			
HR7	CORE	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	Not applicable
aspect: Security Practices			
HR8	ADD	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	·Respecting Human Rights
aspect: Indigenous Rights			
HR9	ADD	Total number of incidents of violations involving rights of indigenous people and actions taken.	-
Society			
		Disclosure on Management Approach	·Compliance ·Our Relationship with Society
aspect: Community			
SO1	CORE	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	-
aspect: Corruption			
SO2	CORE	Percentage and total number of business units analyzed for risks related to corruption.	-
SO3	CORE	Percentage of employees trained in organization's anti-corruption policies and procedures.	·CSR Index 2011
SO4	CORE	Actions taken in response to incidents of corruption.	Not applicable

aspect: Public Policy			
SO5	CORE	Public policy positions and participation in public policy development and lobbying.	·Information Security in Telecommunication Services
SO6	ADD	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	-
aspect: Anti-Competitive Behavior			
SO7	ADD	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	-
aspect: Compliance			
SO8	CORE	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	Not applicable
Product Responsibility			
		Disclosure on Management Approach	·Policies to Protect Customers' Information and Privacy ·Faithfully Serving Our Customers
aspect: Customer Health and Safety			
PR1	CORE	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	·Faithfully Serving Our Customers ·Information Security in Telecommunication Services
PR2	ADD	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	-
aspect: Product and Service Labeling			
PR3	CORE	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	-
PR4	ADD	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	-
PR5	ADD	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	·Improving Customer Satisfaction
aspect: Marketing Communications			
PR6	CORE	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	·Responsible Public Relations and Advertising
PR7	ADD	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	-

aspect: Customer Privacy			
PR8	ADD	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	-
aspect: Compliance			
PR9	CORE	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	Not applicable

Standard Disclosures under Global Reporting Initiative Telecommunications Sector Supplement for NTT Communications Group Corporate Social Responsibility Report 2011

Indicator		Reported information
Internal Operations		
Investment		
IO 1.	Capital investment in telecommunication network infrastructure broken down by country/region.	-
IO 2.	Net costs for service providers under the Universal Service Obligation when extending service to geographic locations and low-income groups, which are not profitable. Describe relevant legislative and regulatory mechanisms.	-
Health and Safety		
IO 3.	Practices to ensure health and safety of field personnel involved in the installation, operation and maintenance of masts, base stations, laying cables and other outside plant. Related health and safety issues include working at heights, electric shock, exposure to EMF and radio frequency fields, and exposure to hazardous chemicals.	·Maintaining and Improving Employee Health
IO 4.	Compliance with ICNIRP (International Commission on Non-Ionising Radiation Protection) standards on exposure to radiofrequency (RF) emissions from handsets.	-
IO 5.	Compliance with ICNIRP (International Commission on Non-Ionising Radiation Protection) guidelines on exposure to radiofrequency (RF) emissions from base stations.	-
IO 6.	Policies and practices with respect to Specific Absorption Rate (SAR) of handsets.	-
Infrastructure		
IO 7.	Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing, and initiatives to reduce visual impacts. Describe approach to evaluate consultations and quantify where possible.	·Biodiversity Conservation
IO 8.	Number and percentage of stand-alone sites, shared sites, and sites on existing structures.	-
Providing Access		
Access to Telecommunication Products and Services: Bridging the Digital Divide		
PA 1.	Polices and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas. Include an explanation of business models applied.	-

PA 2.	Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied.	·Information Security in Telecommunication Services ·Using ICT to Solve Social Issues ·Faithfully Serving Our Customers
PA 3.	Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, for specified time periods and locations of down time.	·Reliably and Securely Bridging the World ·Maintaining Stable and Reliable Telecommunications Services ·Information Security in Telecommunication Services
PA 4.	Quantify the level of availability of telecommunications products and services in areas where the organisation operates. Examples include: customer numbers/market share, addressable market, percentage of population covered, percentage of land covered.	-
PA 5.	Number and types of telecommunication products and services provided to and used by low and no income sectors of the population. Provide definitions selected. Include explanation of approach to pricing, illustrated with examples such as price per minute of dialogue/bit of data transfer in various remote, poor or low population density areas.	-
PA 6.	Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief.	·Reliably and Securely Bridging the World ·Maintaining Stable and Reliable Telecommunications Services ·Activities Related to the Great East Japan Earthquake
Access to Content		
PA 7.	Polices and practices to manage human rights issues relating to access and use of telecommunications products and services. For example: ·Participation in industry initiatives or individual initiatives related to Freedom of Expression ·Legislation in different markets on registration, censorship, limiting access. ·Interaction with governments on security issues for surveillance purposes. ·Interaction with national and local authorities and own initiatives to restrict criminal or potentially unethical content. ·Protecting vulnerable groups such as children. Explain how such policies and practices are adapted and applied in different countries.	·Information Security in Telecommunication Services ·Using ICT to Solve Social Issues ·Faithfully Serving Our Customers ·Our Relationship with Society
Customer Relations		
PA 8.	Policies and practices to publicly communicate on EMF related issues. Include information provides at points of sales material.	-
PA 9.	Total amount invested in programmes and activities in electromagnetic field research. Include description of programmes currently contributed to and funded by the reporting organisation.	-

PA 10.	Initiatives to ensure clarity of charges and tariffs.	-
PA 11.	Initiatives to inform customers about product features and applications that will promote responsible, efficient, cost effective, and environmentally preferable use.	·Faithfully Serving Our Customers
Technology Applications		
Resource Efficiency		
TA 1.	Provide examples of the resource efficiency of telecommunication products and services delivered.	·Reducing Environmental Impact Through Our Services
TA 2.	Provide examples of telecommunication products, services and applications that have the potential to replace physical objects (e.g. a telephone book by a database on the web or travel by videoconferencing).	·Reducing Environmental Impact Through Our Services
TA 3.	Disclose any measures of transport and/or resource changes of customer use of the telecommunication products and services listed above. Provide some indication of scale, market size, or potential savings.	·Reducing Environmental Impact Through Our Services
TA 4.	Disclose any estimates of the rebound effect (indirect consequences) of customer use of the products and services listed above, and lessons learned for future development. This may include social consequences as well as environmental.	·Information Security in Telecommunication Services ·Using ICT to Solve Social Issues ·Faithfully Serving Our Customers
TA 5.	Description of practices relating to intellectual property rights and open source technologies.	-

CSR Report 2011

Environmental Reporting Guidelines Contrast Table

▶ Editorial Policy   ▶ Third-Party Opinion   ▶ GRI Guidelines Contrast Table
▶ **Environmental Reporting Guidelines Contrast Table**

Items		Reported Information
1)Basic Information (BI)		
BI-1	CEO's statement	·Top Commitment
BI-2	Fundamental requirements of reporting	
BI-2-1	Organizations, periods and areas covered by the reporting	·Report Profile ·Editorial Policy ·Back Cover
BI-2-2	Boundary of the reporting organization and coverage of environmental impacts	·Editorial Policy
BI-3	Summary of the organization's business (including management indices)	·Corporate Information ·Business Overview
BI-4	Outline of environmental reporting	
BI-4-1	List of major indicators	·Corporate Information ·Business Overview ·Prevention of Environmental Pollution ·Environmental Impact of Business Activities ·Global Warming Prevention ·Reduction of Waste ·CSR Index 2011
BI-4-2	Summary of objectives, plans and results regarding environmental initiatives	·Fiscal 2010 Results and Fiscal 2020 Targets
BI-5	Material balance of organizational activities (inputs, internal recycling, and outputs)	·Environmental Impact of Business Activities
2)Information and Indicators that Describe the Status of Environmental Management (MPI = Management Performance Indicators)		
MP-1	Status of environmental management	
MP-1-1	Environmental policy in organizational activities	·Basic Philosophy and Environmental Management
MP-1-2	Status of environmental management systems	·Basic Philosophy and Environmental Management
MP-2	Status of compliance with environmental regulations	·Prevention of Environmental Pollution
MP-3	Environmental accounting information	·Environmental Accounting
MP-4	Status of environmentally conscious investment or financing	·Fiscal 2010 Results and Fiscal 2020 Targets
MP-5	Status of supply chain management for environmental conservation	·Our Relationship with Suppliers
MP-6	Status of green purchasing or procurement	·Our Relationship with Suppliers
MP-7	Status of research and development of new environmental technologies and DfE	·Global Warming Prevention

MP-8	Status of environmentally friendly transportation	·Global Warming Prevention ·Environmental Impact of Business Activities
MP-9	Status of biodiversity conservation and sustainable use of biological resources	·Biodiversity Conservation
MP-10	Status of environmental communication	·Basic Philosophy and Environmental Management
MP-11	Status of social contribution related to the environment	·Basic Philosophy and Environmental Management
MP-12	Status of products and services that contribute to the reduction of negative environmental impacts	·Reducing Environmental Impact Through Our Services
3)Information and Indicators that Describe the Status of Activities for Environmental Impacts and Reduction Measures (OPI = Operational Performance Indicators)		
Inputs		
OP-1	Total amount of energy input and reduction measures	·Fiscal 2010 Results and Fiscal 2020 Targets ·Environmental Impact of Business Activities ·Global Warming Prevention
OP-2	Total amount of material input and reduction measures	·Fiscal 2010 Results and Fiscal 2020 Targets ·Environmental Impact of Business Activities
OP-3	Amount of water input and reduction measures	·Environmental Impact of Business Activities
Internal recycling		
OP-4	Amount of materials recycled within an organization's operational area	·Fiscal 2010 Results and Fiscal 2020 Targets ·Environmental Impact of Business Activities
Outputs		
(Products)		
OP-5	Total amount of manufactured products or sales	-
(Discharge and emissions)		
OP-6	Amount of greenhouse gas emissions and reduction measures	·Fiscal 2010 Results and Fiscal 2020 Targets ·Environmental Impact of Business Activities ·Global Warming Prevention
OP-7	Air pollution, its environmental impacts on the living environment, and reduction measures	·Prevention of Environmental Pollution
OP-8	Amount of release and transfer of chemical substances, and reduction measures	·Prevention of Environmental Pollution
OP-9	Total amount of waste generation and final disposal and reduction measures	·Waste Reduction and Recycling Initiatives ·Environmental Impact of Business Activities
OP-10	Total amount of water discharge and reduction measures	·CSR Index 2011

)Information and Indicators that Describe the Status of the Relationship between Environmental Considerations and Management (EEI = Eco-efficiency indicator)		
EEI	Information and indicators for occupational health and safety	·CSR Index 2011
5)Information and Indicators that Describe the Status of Social Initiatives (Chapter 4) (SPI = Social Performance Indicators)		
SPI	Status of Social Initiatives	
-1	Information and indicators for occupational health and safety	·Maintaining and Improving Employee Health
-2	Information and indicators for employment	·Human Resources Development and Evaluation ·A Workplace for Everyone
-3	Information and indicators for human rights	·Respecting Human Rights
-4	Information and indicators for contributions to local communities and society	·Our Relationship with Society
-5	Information and indicators for corporate governance, corporate ethics, compliance and fair trade	·Corporate Governance ·Compliance
-6	Information and indicators for personal information protection	·Information Security
-7	Information and indicators for the broad range of consumer protection and product safety	·Information Security in Telecommunication Services
-8	Economic information and indicators for an organization's social aspects	·CSR Index 2011
-9	Information and indicators for other social matters	·Maintaining Stable and Reliable Telecommunications Services ·Using ICT to Solve Social Issues ·Faithfully Serving Our Customers ·Our Relationship with Suppliers