CSR Report 2012
Bridging the World to Expand
Our Unique Brand of CSR

“Contributing to Global Growth and Development as a Global ICT Company”

A message from Akira Amia, President and CEO

Bridging the World - an important Theme

Expanding into New Horizons

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Top Message

Despite signs of a positive turnaround from the impacts of the Great East Japan Earthquake and Thailand floods, the future surrounding Japan’s economy remains surrounded in uncertainty due to such factors as the slump in overseas economy growth rates and financial instability throughout Europe.

Against this backdrop of a harsh operating environment, we put in place our Vision 2015 growth strategy and are working in unison to become the preferred ICT partner of choice among customers.

In specific terms, and guided by our Global Cloud Vision, we will promote the development and expansion of our global seamless ICT services in order to provide total ICT outsourcing services. At the same time, we will engage in integrated Group-wide sales and marketing activities based on a robust structure of global account management, and do our utmost to support today’s increasingly ubiquitous society through ICT and the comprehensive management reforms of customers by promoting interaction and exchange with overseas subsidiaries as well as M&A companies.

The NTT Communications Group’s very existence is based on the support and close-knit ties not only with its customers, but also a wide spectrum of stakeholders. Looking ahead, we will stride confidently forward working to achieve our Vision 2015 growth strategy, convinced that our ongoing evolution will provide the momentum for resolving society’s issues.

Akira Arima
President and CEO
NTT Communications Corporation
CSR Priority Areas and Index Highlights

Activities aligned to the Group’s new, priority areas identified in 2011 are coming to the end of their first full year of implementation. I would like to touch on the results of our efforts to date, as we work step-by-step to contribute to society in a manner that is unique to the NTT Communications Group.

Area 1: Contributing to Society

We will consistently engage in activities that garner the trust of society.

Areas of Particular Focus
- Develop ubiquitous network infrastructure
- Ensure highly stable and reliable mission-critical infrastructure
- Engage in social contribution activities

Key Social Issues
- Consumers
- Community participation

The NTT Communications Group is endeavoring to put in place infrastructure that is resilient to disaster cognizant of its mission to help create a safe and secure society. At the same time, the Group has put forward a Global Cloud Vision with the aim of providing an optimal communication network for an increasingly ubiquitous society.

Area 2: Protecting the Global Environment

We are working to protect the continued beauty of the planet while supporting the harmonious coexistence of all living things.

Areas of Particular Focus
- Areas of Particular Focus
- Reduce waste
- Reduce paper consumption
- Preserve biodiversity

Key Social Issues
- The environment

As a provider of ICT services, the NTT Communications Group places the utmost emphasis on bringing to fruition a low-carbon society, promoting recycling, and preserving biodiversity. In addition to reducing CO2 emissions at its expanding network of data centers, the Group is paying particular attention to engaging in global-scale activities that encompass a wide-range of areas including efforts to cut back the environmental footprint of its equipment and facilities and increasingly incorporating biodiversity concerns into its business activities.

Area 3: Respecting Our Employees

We take great pains to nurture strong ties of mutual trust based on a deep respect for our employees and make every effort to put in place workplace environments that allow employees to fully express their individuality and fulfill their inherent potential.

Areas of Particular Focus
- Respect diversity and take steps to promote equal opportunity and other objectives

Key Social Issues
- Human rights
- Labor practices

The NTT Communications Group is committed to consistently implementing measures that reflect its deep respect for the diversity of its employees and help build dynamic structures and systems. In addition, the Group has stepped up the pace of multifaceted initiatives that take into consideration the growing borderless nature of business to better harness the capabilities of global human resources.
Area 4: Governance

We have positioned transparent and sound management as a key priority.

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<tr>
<th>Area of Particular Focus</th>
<th>Key Social Issues</th>
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<td>Organizational governance</td>
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<td>Fair business practices</td>
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The NTT Communications Group strictly complies with all statutory and regulatory requirements. At the same time, the Group is fully aware of the importance of protecting the information of customers in its possession. Every effort has been made to confirm that all workplaces are fully appraised of the critical need to maintain monitoring systems that ensure information security and the provision of reliable services.

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Area 1: Social Index

**Develop a 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 to solve the ICT issues faced by corporations. We will work to enhance the user friendliness of this service by successively adding various functions that address customer needs.

**Provide highly stable and reliable data centers**
We will work to maintain and enhance quality by applying Information Technology Infrastructure Library (ITIL®) 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.

**Ensure highly stable and reliable mission-critical infrastructure**

**Develop disaster-resilient networks**
We will seek to build a disaster-resilient society by providing high-quality ICT services through multiple transmission routes, important communication centers spread across wide-ranging locations and other initiatives in preparation for emergencies.

**Implement measures to address major natural disasters and similar occurrences**
We will upgrade disaster drills assuming hypothetical scenarios including a major natural disaster extending to the Tokyo metropolitan area and rolling blackouts. We will reframe and entrench crisis management processes in close cooperation with central and local governments.

**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.  

Number of participants: 1,300

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**Fiscal 2011 Results**

We turned a new page in the provision of global ICT services with the launch of Arcstar Universal One in 159 countries and regions around the world in September 2011. In addition, we accelerated the construction of a network drawing on the lessons learned from the earthquake disaster while at the same time completely constructing a fifth data center in Tokyo that offers cutting-edge green performance and incorporates advanced disaster-risk countermeasures. Through these and other means, we took positive steps toward delivering increased reliability and security.

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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.
2. ITIL® is a registered trademark of the Office of Government Commerce (OGC) of the U.K. government.

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Area 2: Environment Index

Prevent global warming
Reduce CO2 emissions

- Amount of CO2 emissions\(^2\): 278,000 tons-CO2
- Environmental efficiency index for CO2 emissions: 4.38 (million yen in sales per tons of CO2 emitted)

Reduce waste
Reduce office waste

- Recycling rate: 73.4%
- Environmental efficiency index for waste processing: 961 (million yen in sales per tons of final disposal volume)

Reduce paper resource consumption
Reduce paper consumption

- Paper consumed per employee (A4 equivalent): 9,287 sheets
- Environmental efficiency index for paper usage: 2,855 (million yen in sales per tons of paper used)

Preserve Biodiversity

Put in place action guidelines
Put in place action guidelines and systematically assessed activities to data; set priority activity fields

Fiscal 2011 Results

In fiscal 2011, took proactive steps to promote the prevention of global warming. Among a host of measures, introduced new technologies to help reduce electricity consumption at communications buildings; adhered strictly to a policy of energy conservation at office buildings; and adopted a policy to shift to low-emissions vehicles. In addition, pushed forward global initiatives aimed at effectively using water resources and constructing data centers that take into consideration biodiversity conservation concerns in an effort to reduce the environmental impact of the Group’s business activities.

\(^2\) 0.33 kg-CO2 per kWh is used for the CO2 emissions coefficient.

Area 3: Human Resources Index

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.

Number of employees working remotely: Approximately 5,000

Enhance 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.

Rate of female employees returning to work after childbirth: 90% or more

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 in Japan

Fiscal 2011 Results

In fiscal 2011, steps were taken to accelerate global human resource development. In addition to increasing the number of newly recruited employees sent overseas for training and further promoting the exchange of personnel with overseas subsidiaries, we expanded hiring efforts targeting non-Japanese personnel. Moreover, we continued to focus on initiatives that emphasize diversity. During the fiscal year under review, the number of employees working remotely reached 5,000. At the same time, the number of participants in seminars that focus on support for balancing child-raising with careers surpassed 200.
Area 4: Governance Index

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 analyses Group-wide.

**Implement information security surveys**

We will expand information security surveys to include the entire Group.

**Fiscal 2011 Results**

We worked to ensure that all employees had a thorough awareness and understanding of the index to ensure information security in which we have placed considerable emphasis. As a result, we achieved the proactive participation of employees and maintained a completion rate for various security training of 100% by position. In working to strengthen the management of processes and systems, we implemented strict handling procedures for customer information and successfully expanded the implementation of vulnerability analyses of information systems.
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CSR Management Platform

While adhering strictly to all statutory and regulatory requirements as well as the principles of corporate governance, the NTT Communications Group strives to engage in business activities that are in tune with the needs of stakeholders. Endeavoring to contribute to the creation of a sustainable society, we are working diligently to build a sound CSR management platform from a wide range of perspectives.

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- Priority Activity Policy
- As a Member of the NTT Group
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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.

Making Contributions in a Manner that is Unique to the NTT Communications Group

- NTT Communications' Stance toward CSR
  The NTT Communications Group places the utmost importance on contributing to society in an effective and unique manner. To this end, each and every employee is endeavoring to carry out the Group's CSR policy in their daily business activities based on more specific CSR priority activity targets and the Group's environmental vision.

- 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.

- Priority Activity Policy
  The NTT Communications Group continues to establish specific goals as a part of efforts to carry out its CSR policy. In addition, the Group has put in place a separate environmental vision while implementing other wide-ranging measures in keeping with its distinctive business activities.

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

The NTT Communications Group supports global growth and development by fulfilling its corporate social responsibilities in a genuinely distinctive manner through every facet of its business activities.

As a Member of the NTT Group

The NTT Communication Group continues to establish specific goals as a part of efforts to carry out its CSR policy. In addition, the Group has put in place a separate environmental vision while implementing other wide-ranging measures in keeping with its distinctive business activities.

Click here for details on the NTT Group CSR Charter.
Responsibilities as a Member of Society

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.

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.
**Human Rights Policy**

As a company that strives to develop and grow in the global market, NTT Communications considers one of its missions to be the creation of a corporate culture that respects human rights. With this in mind, we work diligently to solve human rights issues through our daily business activities.

**Basic Global Environmental Charter Philosophy**

The NTT Communications Group will work actively to protect the global environment and to help bring about an environmentally friendly society. To this end, the Group will endeavor to provide the highest quality services, through every facet of its business activities from development to delivery, and help realize increased benefits for its customers worldwide.

**Accelerating Global Initiatives**

As our customers have continued to expand their activities on the world stage in recent years, our own business model has evolved to incorporate increasingly diverse, cross-border concerns. Under these circumstances, we are accelerating our activities around the world, cognizant of the importance of introducing and expanding global concerns within our CSR activities, as we help create a sustainable society.
Promoting Dialog with Stakeholders

The NTT Communications Group makes every effort to take into consideration the concerns of its stakeholders in the conduct of its day-to-day activities. Guided by its Business Principle, the Group accordingly engages in management that focuses on stakeholders needs. At the same time, equal emphasis is placed on CSR activities that draw on direct communications with stakeholders.

Basic Stance toward Dealing with Stakeholders

Promoting Opportunities that Harness Feedback from Stakeholders

In promoting dialog with its stakeholders, the NTT Communications Group is generating opportunities to obtain invaluable input and feedback which it in turn channels through to its ongoing activities. We adopt a flexible approach toward promoting wide-ranging opportunities and topics. This includes issues that are carried over from year to year to designated themes and discussion points. The NTT Communications Group makes every effort to engage in detailed and in-depth dialog with its stakeholders.

Examples of Communication with Stakeholders

<table>
<thead>
<tr>
<th>Communication with Customers</th>
<th>We gather feedback from customer satisfaction surveys and take steps to improve satisfaction levels.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Voice of Customer (VOC) Survey, NTT Communications Forum</td>
</tr>
<tr>
<td>Communication with Business Partners</td>
<td>We work with our business partners to improve communications quality, thereby improving customer satisfaction with respect to quality.</td>
</tr>
<tr>
<td></td>
<td>- Anzai-Cameron Forum (ACF), Customer Council, Partner Summit</td>
</tr>
<tr>
<td>Communication with Society</td>
<td>We published a policy on procurement in accordance with our Guidelines for Green Procurement to ensure fair procurement practices.</td>
</tr>
<tr>
<td></td>
<td>Communication with suppliers</td>
</tr>
<tr>
<td>Communication with Employees</td>
<td>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 employee feedback.</td>
</tr>
<tr>
<td></td>
<td>- Dialog with employees, various social contribution activities</td>
</tr>
<tr>
<td></td>
<td>- Dialog with the president, KAIZEN Support Line</td>
</tr>
</tbody>
</table>

Specific Case Study 1: Dialog with Employees

Employees provide the foundation for NTT Communications’ operating as well as CSR activities, and represent the stakeholder set of closest proximity. In order to ensure a sound organization and corporate culture that facilitates the common sharing of mutual tenets and values, we promote dialog between top management and employees. In fiscal 2011, five convention meetings were held with employees. In addition, every effort is made to accelerate initiatives, by sharing the results of meetings with the presidents of Group companies.

Specific Case Study 2: Dialog with Customers

Obtaining wide-ranging feedback through dialog with customers to help ensure a steady stream of higher quality products and services is an extremely important management issue. We have established the Voice of Customer (VOC) Survey Program as a Group-wide initiative and are actively promoting its use as a part of efforts to enhance customer satisfaction and help identify new and innovative services.

Specific Case Study 3: Dialog together with Key Figures

Exchanging opinions (dialog) with external parties is an important process in helping companies improve their ability to contribute to the creation of a sustainable society. Recognizing this critical factor, top management and frontline employees of the NTT Communications Group regularly exchange opinions with prominent figures. During fiscal 2011, two meetings were held to discuss about the Group’s responsibilities as an entity engaged in business activities that impact society, a commonly recognized theme.
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 16 members 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 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 act in accelerating decision-making by the president on operating issues. The Executive Council met 52 times in fiscal 2011. The Market-in-Promotions Council gathered 52 times during the year to deliberate and report on important individual matters. We also established committees, chaired by senior executives designated by the president, to address management issues that require specialized expertise. These committees include 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

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 Audits

Throughout the year, we conduct standardized internal audits of our internal organizations and Group companies, primarily through the Legal and Internal Audit Department. From 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 Subcommittee and the Global Environmental Protection Sub-committee under the CSR Committee. The CSR Committee meets twice a year. In fiscal 2011, representatives of 26 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.

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 2011, 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.

Compliance

Compliance 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 and directors, including those at Group companies, and other personnel. We also actively conduct internal awareness-raising programs, including surveys on corporate ethics and a call for compliance slogans.

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 regarding the NTT Group’s 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.

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. With this as our base, we asked each organization to continue uncovering risks and to consider all appropriate response and other measures during fiscal 2011. Taking into consideration these endeavors, our head office and each organization then specified the level of risk according to the appropriate category, with steps taken to promote all necessary countermeasures. An assessment and analysis of the impact of these risk factors on the Group in terms of its economic standing and reputation were also undertaken. Drawing on the results, we are conducting operating audits on each organization’s ability to respond to risks.

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) 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.
Crisis Risk Management

In the aftermath of the Great East Japan Earthquake, society's interest in crisis risk management and the corporate sector's ability to anticipate and respond to large-scale disasters has risen dramatically. With a renewed awareness toward our responsibilities and the need to maintain telecommunication services, as an integral part of society's basic infrastructure, we are endeavoring to ensure a speedier response to emergency situations. To this end, we are working diligently to improve our management structure. In addition to ensuring strict adherence to crisis management manuals, we are raising awareness across all departments and divisions through a variety of initiatives including training. The fruits of these efforts were evident in our response during the floods in Thailand in 2011 and a clear indication that our actions are having a positive effect.

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 customer 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.

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 2011:

- 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 and Group companies with the introduction of security management surveys. 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.

Security Declaration and Information Protection Policy
Measures 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 2012, 15 Group companies, comprising eight Group companies in Japan and seven 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.

Accelerating Initiatives in line with CSR Indices

The NTT Communications Group has identified efforts to “ensure information security” as one of four priority CSR index areas, and is engaging in appropriate ongoing activities. Among a host of wide-ranging activities, the Group is strengthening the reliability of its information handling processes, acquiring and maintaining ISMS certification, and conducting security surveys. We have identified raising workplace awareness as an especially important responsibility as an ICT company and are actively conducting education and training. Taking into consideration our mission to provide a safe and reliable network society, we will continue to accelerate initiatives encompassing overseas Group companies.

Respecting Human Rights

Promoting Human Rights Education

In order to create a rich corporate culture that respects human rights, the NTT Communications Group put in place a basic human rights education policy in July 1999 and has since continued to actively promote human rights awareness. We also established the Human Rights Awareness Committee, which is charged with the responsibility of promoting human rights education and a corporate constitution that does not tolerate discrimination of any kind. Among its many duties, the Committee reports on educational activities and deliberates on 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.
Basic Policy on Human Rights Education

As a corporate group that strives diligently to develop its global business, NTT Communications places the utmost importance on solving human rights issues including discrimination as a part of efforts to build a rich corporate culture that respects human rights. As we strive to establish a corporate constitution that does not tolerate any form of discrimination, we are working to find solutions to human rights and discrimination issues through every facet of our business activities.

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 Training

All regular and temporary employees of the NTT Communications Group must attend classes on human rights in the workplace in order to foster a heightened sense of awareness within each and every employee. 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 help bring about various management-related improvements in the workplace. In fiscal 2011, almost all Group-wide regular and temporary employees attended classes. In the area of sexual and power harassment, and in addition to the classes on human rights in the workplace, 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.

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 28,002 entries from 10,026 people, an all-time high, were submitted in fiscal 2011. The top prize-winning slogan was: “Just an e-mail Your thoughts and feeling remain unseen.” The slogans are collected from all Group employees, including employees of overseas subsidiaries, temporary employees and their family members. In fiscal 2011, we again witnessed an increasing dominance in the number of submissions from employees of overseas subsidiaries.

We hope to increase understanding of human rights by introducing the best slogans to all workplaces so that employees have something close at hand to remind them of human rights and to further heighten awareness.
# CSR Indexes 2011-2012

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.

## 2011 Index Results and 2012 Targets

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

### Achievement Levels

<table>
<thead>
<tr>
<th>Self-Assessment in Four Levels</th>
<th>(\star\star\star\star)</th>
<th>(\star\star\star)</th>
<th>(\star\star)</th>
<th>(\star)</th>
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<tbody>
<tr>
<td>Target not achieved at all</td>
<td>(\star\star\star\star)</td>
<td>(\star\star\star)</td>
<td>(\star\star)</td>
<td>(\star)</td>
</tr>
<tr>
<td>Target only partially achieved</td>
<td>(\star\star\star\star)</td>
<td>(\star\star\star)</td>
<td>(\star\star)</td>
<td>(\star)</td>
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<tr>
<td>Target almost achieved</td>
<td>(\star\star\star\star)</td>
<td>(\star\star\star)</td>
<td>(\star\star)</td>
<td>(\star)</td>
</tr>
<tr>
<td>Target achieved</td>
<td>(\star\star\star\star)</td>
<td>(\star\star\star)</td>
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## 2011 CSR Index Results

<table>
<thead>
<tr>
<th>Priority Activities</th>
<th>Measures</th>
<th>Qualitative Targets</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provide Acrosar Universal One</strong></td>
<td>Acrosar 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.</td>
<td>Commerced providing “Acrosar Universal One” in May 2011. Launched global development in 169 countries and regions in September 2011. By providing “Acrosar Universal One Mobile” in December 2011 and customized portal functions from February 2012, sequentially added functions to meet customer needs.</td>
<td>(\star\star\star\star)</td>
</tr>
<tr>
<td><strong>Provide reliable and secure hosting services</strong></td>
<td>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.</td>
<td>In hybrid cloud services we expanded cooperation with Microsoft Japan Co., Ltd. and commenced providing services such as the high-quality, cost-effective, high-capacity “Biz Simple PaaS” virtual hard disk service and the new low-cost, highly scalable “Cloud” public cloud service. We thereby extended our services and improved their user friendliness.</td>
<td>(\star\star\star\star)</td>
</tr>
<tr>
<td><strong>Provide Biz Mail cloud computing e-mail service to corporate customers</strong></td>
<td>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.</td>
<td>We started giving official support to enterprises and tablet computers, we broad the start of global compatibility, and promoted the construction of ubiquitous network infrastructure.</td>
<td>(\star\star\star\star)</td>
</tr>
<tr>
<td><strong>Develop ubiquitous network infrastructure</strong></td>
<td>We will work to maintain and enhance quality by applying Information Technology Infrastructure Library (ITIL) 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-resistant data center operations.</td>
<td>We completed and commenced operations at Tokyo No. 5 Data Center, which offers state-of-the-art green performance and is prepared for all disaster risks. For planning quality improvements such as the obtaining of ISO 20000 certification with Tokyo No. 5 Data Center, we were awarded the General Grand Prix at the ASPN-hosted Fifth ASPN-SaaS-Cloud Awards 2011. In addition, we were selected for Best Service in Nikkei Computer magazine’s Cloud Ranking Data Center category.</td>
<td>(\star\star\star\star)</td>
</tr>
<tr>
<td>Ensure highly stable and reliable mission-critical infrastructure</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>Provide reliable and secure OCN services</td>
<td>We will constantly strive to upgrade and expand services so that all customers, irrespective of age group, can reliably access an Internet environment.</td>
<td>Aimed at all customers who want to use smooth Internet communications—mainly e-mail and Web browsing—day by day. When away from home or on the move, we started providing “OCN Mobile Entry” in March 2012.</td>
<td>⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>Develop disaster-resilient networks</td>
<td>We seek to build a disaster-resistant 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.</td>
<td>We have made it our basic policy to lay these relay communication routes in Japan. Based on experiences in the Great East Japan Earthquake, we conducted a further survey of domestic relay communication routes and made reliability improvements by constructing new routes that in some areas were more isolated than before.</td>
<td>⭐⭐⭐⭐</td>
</tr>
<tr>
<td>Measures to address major natural disasters and similar events</td>
<td>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 enhance crisis management processes in close cooperation with central and local governments.</td>
<td>Based on experiences in the Great East Japan Earthquake, we assumed an earthquake with an epicenter under the Tokyo metropolitan area and conducted on February 23 a different, more realistic type of disaster response training not presented in previous scenarios.</td>
<td>⭐⭐⭐⭐</td>
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<table>
<thead>
<tr>
<th>Implement network surveillance 24 hours a day, 365 days a year</th>
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<tbody>
<tr>
<td>24-hour, year-round monitoring to ensure reliability and security of corporate information systems (SOC)</td>
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<table>
<thead>
<tr>
<th>Participate in community beautification programs and other social contribution activities</th>
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<tbody>
<tr>
<td>Engage in social contribution activities</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Promote Eco-Corp Movement</th>
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</thead>
<tbody>
<tr>
<td>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</td>
</tr>
<tr>
<td>Global Environmental Protection</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Preventing global warming</strong></td>
</tr>
<tr>
<td>Reduce CO2 emissions</td>
</tr>
<tr>
<td>Consider and implement new measures to reduce power consumption, such as setting PCs to power conservation mode, enhancing the automated control of air conditioning systems in telecommunications buildings, and monitoring power sensors. CO2 emissions: <strong>315,000 tons-CO2 or less</strong> Environmental efficiency index for CO2 emissions: <strong>4.59</strong> (Million yen in sales per tons of CO2 emitted)**</td>
</tr>
<tr>
<td>In office buildings we implemented a raft of power saving measures wherever these were possible. For example, we set PCs to power conservation mode, removed some lights and air conditioners, brought forward summer work start times and made changes in work style. In addition to ongoing measures, such as replacing air conditioners with more efficient models and cleaning air filters, we verified the introduction of energy-saving air conditioning solutions that use new technologies. CO2 emissions: <strong>278,000 tons-CO2 or less</strong> Environmental efficiency index for CO2 emissions: <strong>4.30</strong> (Million yen in sales per tons of CO2 emitted)**</td>
</tr>
<tr>
<td><strong>Reducing waste</strong></td>
</tr>
<tr>
<td>Reduce office waste</td>
</tr>
<tr>
<td>We will implement measures to encourage on-site garbage separation and utilize thermal recycling. Recycling rate: <strong>70% or more</strong> Environmental efficiency index for waste processing: <strong>1,274</strong> (Million yen in sales per tons of final disposal volume)**</td>
</tr>
<tr>
<td>Incrementally implemented enhanced garbage separation in all buildings. Introduced SS BOX, including at Group companies. Recycling rate: <strong>73.4% or more</strong> Environmental efficiency index for waste processing: <strong>0.61</strong> (Million yen in sales per tons of final disposal volume)**</td>
</tr>
<tr>
<td><strong>Reduce paper resources</strong></td>
</tr>
<tr>
<td>Reduce paper consumption</td>
</tr>
<tr>
<td>Implement ICT-driven paper reduction initiatives; strictly enforce double-sided and reduced-size printing Paper consumed per employee (A4 equivalent): <strong>9,300 sheets</strong> Environmental efficiency index for paper usage: <strong>2,734</strong> (Million yen in sales per tons of paper used)**</td>
</tr>
<tr>
<td>Introduced certified printers, including at Group companies. Implemented ICT-driven paper reduction initiatives. Strictly enforced double-sided and reduced-size printing Paper consumed per employee (A4 equivalent): <strong>9,287 sheets</strong> Environmental efficiency index for paper usage: <strong>2,656</strong> (Million yen in sales per tons of paper used)**</td>
</tr>
<tr>
<td><strong>Preservation of biodiversity</strong></td>
</tr>
<tr>
<td>Put in place action guidelines</td>
</tr>
<tr>
<td>We will promote business activities giving consideration to biodiversity based on environmental assessments.</td>
</tr>
<tr>
<td>We formulated action guidelines, systematically assessed past activities, and set priority areas. **</td>
</tr>
<tr>
<td><strong>Improving Our Employees</strong></td>
</tr>
<tr>
<td>Promote diverse working styles by extending work-related reforms across the Company</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>We devised an environment that encourages a variety of ways of working. 1: Increased the number of people eligible to use the telecommuting system on childcare and nursing grounds (children in the third to sixth grades at elementary school, including managers); 2: Created a remote working environment by thin client systems that enable work to be carried out not only by telecommuting, but also when on the move and while traveling as well as at other buildings; 3: Encouraged efficient ways of working by, for example, making use of the time between engagements and holding paperless meetings through the use of tablet computers; 4: Held lectures by external experts with a view to changing ways of thinking with regard to improvements in productivity. Number of people using telecommuting system up \ Number of people present at lectures given by external experts: approx. 850 \ Number of people working from remote locations: approx. 5,000**</td>
</tr>
</tbody>
</table>
### Respect diversity and take steps to promote equal opportunity and other objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing support for balancing child raising responsibilities and careers</td>
<td>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 ergonomically with a good work-life balance.</td>
<td>★★★★</td>
</tr>
<tr>
<td>Improve the statutory disabled employee ratio</td>
<td>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.</td>
<td>★★★★</td>
</tr>
<tr>
<td>Expand personnel exchanges on a global scale</td>
<td>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. Bond 50 employees from Japan to overseas and 30 employees from overseas to Japan.</td>
<td>★★★★</td>
</tr>
<tr>
<td>Retain employees who reach retirement age</td>
<td>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.</td>
<td>★★★★</td>
</tr>
</tbody>
</table>

### Governance

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuously raise awareness by implementing training programs</td>
<td>We will rededicate efforts 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%.</td>
<td>★★★★</td>
</tr>
<tr>
<td>Strengthen management of processes and systems</td>
<td>We will strengthen management of processes for safely handling customer information, bolster vulnerability analyses of information systems and expand such analysis Group-wide.</td>
<td>★★★★</td>
</tr>
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20
<table>
<thead>
<tr>
<th>2012 CSR Index Targets</th>
<th>Measures</th>
<th>Target</th>
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</thead>
<tbody>
<tr>
<td><strong>Develop ubiquitous network infrastructure</strong></td>
<td>Provide Acasar Universal One</td>
<td>Acasar 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.</td>
</tr>
<tr>
<td></td>
<td>Provide reliable and secure hosting services</td>
<td>We will provide platform services centered on BUHHosting 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 improve and extend our range of services, in an effort to boost user friendliness.</td>
</tr>
<tr>
<td></td>
<td>Provide Biz Mail cloud computing email services to corporate customers</td>
<td>This 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. New users (as increased by 4,000)</td>
</tr>
<tr>
<td></td>
<td>Provide highly stable and reliable data centers</td>
<td>We will provide data centers via more than 100 sites across the world. While implementing quality control by means of a unified global standard, we will work toward disaster-resistant data center operations and plan further developments and expansion.</td>
</tr>
<tr>
<td></td>
<td>Provide mobile care safety confirmation and notification service</td>
<td>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 adopt the service to various situations in which it may be utilized, while further upgrading and increasing related functions. We will also target service and capability improvements in light of situations that arose after the Great East Japan Earthquake of March 11, 2011.</td>
</tr>
<tr>
<td></td>
<td>Provide reliable and secure CDN services</td>
<td>We will constantly strive to upgrade and expand services so that all customers, irrespective of age group, can reliably access an Internet environment.</td>
</tr>
<tr>
<td><strong>Ensure highly stable and reliable mission-critical infrastructure</strong></td>
<td>Develop disaster-resilient networks</td>
<td>We seek to build a disaster-resistant 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.</td>
</tr>
<tr>
<td></td>
<td>Measures to address major natural disasters and similar events (zero accidents)</td>
<td>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 strengthen crisis management processes in close cooperation with central and local governments. Annual drills</td>
</tr>
<tr>
<td></td>
<td>Implement network surveillance 24 hours a day, 365 days a year</td>
<td>We will service surveillance of services for customers (networks, Internet, cloud computing, hosting, and voice services, etc.) all times, while promoting seamless global responses. Reduction in number of long-term failures In Japan: 148/year Overseas: 500/year</td>
</tr>
<tr>
<td></td>
<td>Ensure the reliability and security of corporate information systems</td>
<td>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 security of the corporate information systems we are entrusted to service, with 24-hour, 365 days-a-year operations, and we address a variety of changes in society.</td>
</tr>
<tr>
<td><strong>Engage in social contribution activities</strong></td>
<td>Participate in community beautification programs and other social contribution activities</td>
<td>We aim to achieve this target by implementing various cleanup programs and other activities, and tying them into NTT Group GTN initiatives. 3,000 participants</td>
</tr>
<tr>
<td></td>
<td>Promote Ecopop Movement</td>
<td>We will work to collect plastic bottle caps as part of a concerted initiative throughout the NTT Group. 1,700,000 caps</td>
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</table>

*1 Systemic guidelines regulating the operation and management of computer systems formulated by the U.K. government. The guidelines are compiled into several volumes of books. ITL® is a registered trademark of the Office of Government Commerce (OGC) of the U.K. government.

*2 0.33 kg CO2 per kWh is used for the CO2 emissions coefficient.
<table>
<thead>
<tr>
<th>Global Environmental Protection</th>
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<tbody>
<tr>
<td><strong>Preventing global warming</strong></td>
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<tr>
<td><strong>Reducing waste</strong></td>
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<tr>
<td><strong>Preservation of biodiversity</strong></td>
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<table>
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<tr>
<th>Respecting Our Employees</th>
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</thead>
<tbody>
<tr>
<td><strong>Promote diverse working styles by extending work-related reforms across the Company</strong></td>
</tr>
<tr>
<td><strong>Extending support for balancing child-rearing/care responsibilities and careers</strong></td>
</tr>
<tr>
<td><strong>Respect diversity and take steps to promote equal opportunity and other objectives</strong></td>
</tr>
<tr>
<td><strong>Expand personnel exchanges on a global scale</strong></td>
</tr>
<tr>
<td><strong>Improves ratio of women in management positions</strong></td>
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<table>
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<tr>
<th>Governance</th>
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</thead>
<tbody>
<tr>
<td><strong>Ensure information security</strong></td>
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</table>
Special Feature on Society

Contributing to Society
Reliably and Securely Bridging the World
Serving as a continuous bridge for society in efforts to foster new business opportunities.

KEY FIGURE
24/7 Operation and Maintenance System

KEY ENGAGEMENT
- Lending a keen ear to the concerns of customers (VOC)
- Communicating with business partners and overseas carriers through such initiatives as the Arcstar Carrier Forum
- Engaging in social contribution and cultural support activities

GLOBAL

Supporting a Ubiquitous Society through ICT under a developed Global Cloud Vision

Putting Forward a Fresh Vision to Address the Expectations of an Increasingly Global Society
In addition to reliable Internet access anywhere in the world on a 24/7 basis, communication needs continue to expand together with the advent of a borderless global economy. In addition, the critical role that ICT plays during emergency situations has attracted growing attention with the incidence of such large-scale disasters as the Great East Japan Earthquake. Against this backdrop, a portion of the NTT Communications Group’s Global Cloud Vision announced in October 2011 has introduced innovative initiatives that can be expected to address the expectations of society following a major disaster.

Delivering Safe and Reliable Services that Transcend the World
A defining feature of the Group’s Global Cloud Vision entails the use of its cloud computing to deliver an environment in which wide-ranging and highly reliable services can be applied from anywhere around the world. This is made possible through a one-stop capability that encompasses everything from a comprehensive terminal menu through data centers distributed widely throughout the world to a high quality communication network. More than anything else, this forum allows us to contribute to society through the application of our management resources, as a global communications specialist.

Building on our communications and data center network that provides a seamless operating platform that transcends users’ needs in Japan and overseas, we will actively employ virtualization technology that bridges data centers around the world to deliver advanced and highly reliable services.
JAPAN

Drawing on the Lessons Learned from the Recent Spate of Major Disasters to Build an Increasingly Robust Network

Preparing for Every Possible Contingency around the World

Drawing on past experience and more recently the lessons learned following the Great East Japan Earthquake, we are adopting a unified approach when considering the construction of facilities that are resilient to disasters and that can facilitate an increasingly prompt restoration.

The NTT Communications Group recognizes that one of its important missions is to collate all relevant information for use in the construction of infrastructure in Japan and overseas.

Toward a More Robust and Flexible Network

Reflecting on our restoration activities, we distributed all records relating to recovery activities following the Great East Japan Earthquake to all employees. Wary of the purpose of our experiences following each disaster from deteriorating with time, we are working to further enhance our comprehensive disaster response capabilities with an increased sense of mission. In specific terms, we took steps to review the distance between cables on a nationwide basis following interruptions to cables across multiple routes in Japan.

In addition, steps are being taken to build a flexible network, drawing on the broad experiences and knowhow of the NTT Communications following interruptions to multiple international submarine cables in the aftermath of the Taiwan Offshore Earthquake. Among a host of measures, Asia Submarine Cable-Express (ASE) cable is being laid avoiding areas that are susceptible to frequent earthquakes.

Disaster Countermeasures

Making the most of the lessons learned following the Great East Japan Earthquake, the NTT Communications Group was quick to gain an accurate picture of local conditions following the floods in Thailand through close collaboration between staff at NTT Communications (Thailand) Co., Ltd. and members of the disaster countermeasures team in Japan. This collaboration was also helpful in preventing damage to the equipment and facilities of many customers and in putting forward alternative communication methods. In a current environment in which expectations of ICT during periods of disaster are extremely high, the NTT Communications Group will continue to work in unison to deliver safe and reliable networks.

Making the most of the lessons learned in responding to the floods in Thailand

Buffered by severe flooding in Thailand in 2011, the NTT Communications Group took steps to build an in-house response structure taking into consideration its Great East Japan Earthquake Crisis Manual. At the same time, the Group set up the Crisis Response Office while working diligently to respond to the needs of customers. As a result of these endeavors, the Group was able to minimize the damage to customers caused by the flooding disaster.

Moving forward, the NTT Communications Group is committed to providing safe and reliable global services that remain resilient to any and all disasters.

Kyoji Takahisa
Vice president
NTT Communications (Thailand) Co., Ltd.
CSR Report 2012
Contributing to Society  Detailed Report

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
- Providing Ancestral Universal One
- Global Cloud Vision
- Providing Safe and Secure Data Centers
- Participating in businesses around the World
- Construction Begins on Asia Submarine-Cable Express, a High-Reliability Cable that will Link the ASE Region
- The World’s Largest Internet Infrastructure Supporting a Stable Network Environment
- Submarine Cable-Laying Technology
- Achieving Managed Quality Operations (Highly Reliable Maintenance Services)
- Keeping Networks Reliable Following Disasters
- Providing Services that Underpin Business Continuity
- Sapporo Business Continuity Center

Information Security in Telecommunications Services
- Enhancing Monitoring and Operations for Enterprise Network Security
- Enhancing ISP Security Services
- Display of the VeriSign Seal
- Providing Security Functions for Mobile Connect Smartphones
- OCN Anti-DDoS Service Protects Servers and Networks

Using ICT to Solve Social Issues
- Contributing through BOP Businesses
- Developing a Wealth of Services in line with the Increasingly Widespread Use of the Internet in Daily Lives
- Strengthening Web Search Service Provider Suicide Prevention Measures
- Implementing Disaster Prevention and Public Media Fields Tests
- Providing an OSP Plus Service
- Providing a School System Platform Using Cloud-Based Education Support Services to the Yokohama City Board of Education
- Providing OCN IPv6 Services
- Providing a Safe Internet Environment for Children
- Measures Aimed at Blocking Child Pornography Sites
- ICT Supporter
- "com Master" Internet Certification for ICT Personnel Development
- "CAVU" Home-Based Call Center Operations
- Health Enhancement Assist Service Joint Field Trial
- Participating in e-Net Caravan

Faithfully Serving Our Customers
- Implementing Customer Satisfaction Surveys
- OCN Customer Feedback - Quickly Addressing Customer Needs
- Evaluations of NTT Plala Educa
- Simultaneous Acquisition of ISO 14001 and OHSAS 18001 Certification
- Formulation of Advertising Regulations
- Universal Design Initiatives
- Providing Service Level Agreements (SLAs)
- Quality Improvement Forum with Overseas Partner Carriers

Our Relationship with Society
- NTT Communications’ Social Contribution Activities
- Donations for Disaster Relief Via the “E-Money Chocomi” Service
- Participating in the “chokotto ikido program”
- Contributing to Society through Websites
- Group Social Contribution Activities through CSR Programs
- Ecocap Movement
- Core Business Initiatives Addressing the Great East Japan Earthquake
- Ongoing Activities in Support of Disaster Stricken Areas by Employees

Our Relationship with Suppliers
- Promoting Fair Transactions
- CSR Procurement Policy
- Procurement Department Initiatives

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Maintaining Stable and Reliable Telecommunications Services

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.

Providing Services that Help Realize an Evolving Ubiquitous Society

Providing Arcstar Universal One
Cloud services are quickly becoming an integral component of the growth scenarios of companies. Turning to network services, reliable and secure outsourcing environments that are compatible with a full-scale cloud era are also attracting significant expectation and attention.
NTT Communications initially launched Arcstar Universal One, a cloud-based enterprise network service, in Japan in May 2011. From September 2011, this service was expanded from Japan to 159 countries around the world. In this manner, the Company is working to seamlessly provide services that deliver the superior quality and reliability that is expected of cloud-based networks in and outside Japan.
Looking ahead, NTT Communications will continue to offer customers advanced services that address business needs, which continue to gather pace on a global scale, and help swiftly realize seamless business growth and development in Japan and overseas, as a global ICT partner.
Click here for details regarding the Arcstar Universal One.

Global Cloud Vision
Efforts to optimize the ICT systems that underpin the current rapid globalization of business are attracting significant attention. In this context, the use of cloud technology holds the key in solving such issues as the ability to integrate and manage on a consolidated basis ICT systems that are widely dispersed throughout the world, the reduction of costs, and improvements in productivity. NTT Communications has put forward a Global Cloud Vision that entails the seamless fusion of ICT services, encompassing everything from cloud technology, networks to applications, and security. Moving forward, the Company will help customers in their management innovation endeavors through global total ICT outsourcing that only a telecommunications carrier can provide.
Click here for details regarding the Company’s Global Cloud Vision.

Providing Safe and Secure Data Centers
As a part of efforts to help enterprises deploy cloud-based networks worldwide, NTT Communications is strengthening its data center services in Japan and overseas. At the same time, the Company provides seamless and scalable services that allow the operation of multiple bases scattered around the world as a single data center unit. Recognizing the importance of maintaining a highly reliable network of data centers, NTT Communications is engaging in the following multifaceted activities.

1. High-quality facilities
   Enable proper and swift facility maintenance during operations by employing a tier III-level facility setup

2. Highly reliable network connectivity
   Develop and provide a significant volume of global network services including high-speed, high capacity tier 1 Internet backbone and Arcstar Universal One services

3. Detailed managed services
   Provide total management of customers’ ICT infrastructure from networks to servers through help desk services that can accommodate multiple languages and that can run 24 hours/day 365 days a year and operating system

The Company’s activities have been highly acclaimed. NTT Communications was recognized for providing the “Best Service” in the data center category in each of the second through to fourth cloud rankings organized by Nikkei Computer magazine.

*1 A facility setup using two or more types of systems to ensure extensive redundancy with respect to such key functions as commercial power supply, air conditioning, UPS, as well as disaster prevention and restoration, with no single point of failure.
*2 High-quality Internet through an Internet Service Provider (ISP) group that maintains its own global-scale broadband IP backbone eliminating the need to rely on an upstream provider

Click here for details regarding the Company’s data centers.
Participating in Businesses around the World

NTT Communications is participating in businesses around the world in a variety of ways as a part of efforts to ensure the growth and development of a global ubiquitous society.

In Asia, where use of the Internet is growing rapidly, we began providing Internet services using a proprietary optical fiber network laid previously in an industrial estate in Indonesia from March 2012. We also reached agreements with the governments Laos and Brunei in February 2012 and May 2012, respectively, to provide international Internet access services to government-managed connection bases. NTT Communications is also active in areas other than Asia. In Eastern Europe, we established international IP backbone connection bases in Hungary, Romania, and Bulgaria in November 2011.

Through these and other initiatives, NTT Communications will continue to help improve Internet environments across wide-ranging regions. At the same time, we will endeavor to deliver higher quality services that address the needs of local customers. In order to further enhance the company's services, we took up majority equity interests in an ICT service provider in Australia and a data center–related operator in India in May 2011 and January 2012, respectively. These measures are aimed at bolstering management ties with local companies.

Looking ahead, we will engage in a broad spectrum of balanced activities that contribute to Internet market as well as business growth.

Network Technologies and Maintenance Systems for an Advanced Information Society

Construction Begins on Asia Submarine-Cable Express, a High-Reliability Cable that will Link the Asia Region

Now, more than ever, companies advancing their global business regard a reliable communications infrastructure as the lifeline 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.

International communications traffic in Asia is increasing, with demand rising for highly reliable, minimal latency submarine cables with broader bandwidths. Asia Submarine-cable Express (ASE), the new high-bandwidth optical submarine cable, construction of which commenced in 2011, will connect Telecom Malaysia, PLDT headquartered in the Philippines and StarHub in Singapore with the rest of the Asian region. NTT Communications designed a route that will minimize latency from Japan to Taiwan and Singapore and enable ASE to avoid cable failures near the Bashi Channel south of Taiwan, which is vulnerable to frequent earthquakes and typhoons, making ASE a more highly reliable, minimal latency optical submarine cable.

In 2011, through collaboration between the main carriers in each country–Japan, South Korea, mainland China, Taiwan, Hong Kong, Singapore, Vietnam and Thailand—agreement was reached to construct the Asia Pacific Gateway (APG), a high-capacity submarine optical cable. Through its participation in the cooperative construction of APG in addition to ASE, NTT Communications will strengthen the cable volume it possesses in the Asian region, ensure redundancy by providing several cable routes and provide its customers with highly reliable international networks and cloud services.

The World’s Largest Internet Infrastructure Supporting a Stable Network Environment

NTT Communications expanded its Internet service provider (ISP) industry-leading 600Gbps*1 the capacity of the lines between Japan and the United States, by which is transmitted the largest amount of data via its Global IP backbones (Global IP Network services).

Connected to fixed and mobile telecom companies, ISPs, data center operators and content providers, NTT Communications' Global IP backbones carry many Internet traffic linking Japan with overseas.

Although the international communications cable between Japan and the United States was partially damaged during the Great East Japan Earthquake of March 11, 2011, the impact could be minimized by a fully redundant cable structure and collaboration between multiple overseas carriers and cable companies based on established cooperative relationships. This Global IP backbone uses a dual-stack (IPv4 and IPv6) configuration and is becoming one of NTT Communications core networks located at the heart of IPv6, the next-generation communications standard.

Strengthening its efforts in Asia and emerging countries as a global Tier 1** carrier, NTT Communications is working to provide its customers with a communications environment of even higher quality.

*1 600Gbps, equivalent to approximately 35,714 channels of digital terrestrial television or 513 years’ worth of content in a daily newspaper

*2 Tier 1 is an IP group large enough to not purchase Internet routing information from other companies.

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.”

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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 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. Taking the next step forward, we restructured our support departments in Japan and overseas under the one organization in fiscal 2011 following reorganization in April 2011 and August 2011. Through this initiative, service managers are better placed to seamlessly respond in Japan and overseas to efforts by customers to expand their systems overseas. Drawing on the lessons learned from the Great East Japan Earthquake that occurred on March 11, 2011, we are accelerating steps to put in place an operating structure that is capable of maintaining a stable network. Looking ahead, in addition to our reception desk, we will adopt an integrated approach involving control services for business breakdowns and service manager functions. From a personnel perspective, 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 operations that take advantage of ICT.

Disaster Response Initiatives

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. Based on the scenario of an earthquake striking directly beneath the Tokyo Metropolitan Area, we conducted quick-response drills by our disaster response team in February 2011. These drills differed from training and were conducted without prior notification to disaster response team members. The scenario envisioned major damage to the Tokyo Metropolitan Area, to the extent that it ceased to function as a capital city. The drill entailed a specific response flow encompassing the establishment of an Initial Response Headquarters in the Kansei region of western Japan. We assumed that the Tokyo disaster response team was unable to travel by normal means and thus had to commute on foot from their places of work to the Disaster Response Headquarters. Steps would then be taken to take over the headquarters function from Kansei.

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.

Providing Services that Underpin Business Continuity

Offering a range of high-quality services for such crises as major earthquakes and pandemics, NTT Communications supports the continuation of its customers’ businesses. To give a typical example, earthquake early warning information is a service that delivers earthquake information, including seismic intensity and arrival time, before tremors are actually felt. Enabling initial damage prevention and ensuring safety, this is said to be an effective service in formulating a business continuity plan (BCP), since business restoration can be expected soon after an earthquake. A service that simultaneously reports safety confirmations both verifies and gathers information on the safety of employees at times of natural disasters, including new-strain influenza and earthquakes. Available on a routine basis via communications networks, this service is also effective in confirming the safety of school contact networks and the elderly as well as in simultaneously contacting employees visiting clients.

These efforts are highly regarded overseas. For example, for its Biz Hosting Basic cloud-based virtual hosting service NTT Comunications became the first company in the Asia-Pacific region to receive the Red Hat Cloud Leadership Award from Red Hat Inc. One of the reasons cited for bestowing the award was that NTT Communications is “working to solve social problems by providing comprehensive BCP solutions that utilize cloud computing.”

Click here for details regarding NTT Communications’ services that support business continuation.
Sapporo Business Continuity Center

In June 2006, 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). Because ICT systems are crucial to corporate activities, data centers have been geographically dispersed to 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 20000:2011 certification, an international standard for ITSMs. At the same time, we introduced ZABICOM, an ITIL®-based open-source monitoring system allowing easy customization. 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.

*1 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.
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.

Enhancing Monitoring and Operations 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 threats 24 hours a day, 365 days a year in order to protect customers’ information systems and assist business continuity.

The Financial Instruments and Exchange Act, commonly known as the Japanese Sarbanes-Oxley Act of J-SOX, came into effect beginning with the fiscal year ended 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.

Moreover, based on its Global Cloud Vision announced in October 2011, NTT Communications launched globally seamless security services for total protection matched to a wide range of ICT environments including the Company’s Enterprise Cloud and On-premise systems. Complementing this initiative, we began offering Biz Managed Security services to address new threats including targeting attacks from June 2012.

Combating Viruses and Internet Crime

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”). In addition, steps have been taken to provide blocking services to restrict Internet access to inappropriate sites as well as sites where access is not required from personal computers. Moreover, Palla provides a free filtering service that blocks communications originating from Winny, a file-sharing program which has become a major problem.

In fiscal 2011, we released My Pocket, a support and storage service for smartphone users. This service is available whether contracted with OCN or not and represents our first step toward addressing smartphone needs and developing services for a wider range of compatible devices.

We added services covering credit card compensation to OCN Premium Support and undertook to further augment services. Credit card compensation provides cover for damages incurred through unauthorized use of credit cards allowing customers to engage in online shopping, internet auctions and related activities with increased peace of mind. The total number of OCN Premium Support facilities reached approximately 160,000 as of the end of fiscal 2011. Looking ahead, we plan to release new security services for smartphone and tablet terminal users.

Display of the VeriSign Seal

NTT Resonant, in a tie-up with VeriSign Japan K.K., from January 2010 began displaying the VeriSign Seal*1 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.

*1 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.
Providing Security Functions for Mobile Connect Smartphones

Last year, there was an increasing need from smartphone users who said they wanted to use their terminals in their workplaces. The number of instances in which companies consider this to be a constructive move is also increasing. On the other hand, the use of smartphones in the workplace poses the challenge of measures to enhance security, such as those to prevent information leaks to protect a company’s confidential information when a terminal is lost or stolen as well as measures to guard against terminal identity theft. In response to these needs, from December 9, 2011, NTT Communications expanded the smartphone security functions in Mobile Connect, which enables simple and safe connection to a company’s internal system from remote locations. Specifically, this was done by browser functions that do not leave any trace of data, such as content cache and access history, remaining on the terminal, and by functions that are capable of converting files created in commercial software, enabling them to be viewed on a Web browser. At a time when smartphones are becoming more commonplace, NTT Communications is expanding their useful features by means of ongoing security measures and encouraging their business use.

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.

*1 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 of the server’s processing capacity.

Using ICT to Solve Social Issues

Helping to Solve Social Issues in Developing Countries

Contributing through BOP Businesses

The Base of Pyramid (BOP) business, by which companies contribute through their business to meet the challenges facing the international community such as poverty in developing countries has swiftly attracted great deal of attention in recent years. As a company that globally supports IT infrastructure, NTT Communications established an in-house study group in 2010, becoming the first in the industry to address the BOP business. Since 2010, we have been developing an educational support business adopted by the BOP business support project of the Japan International Cooperation Agency (JICA) particularly in Indonesia. Utilizing information and communication technologies (ICT), we are currently steadily promoting a range of initiatives to provide educational opportunities to children in the lower income bracket in Indonesia.

These efforts are well received by the local communities, and NTT Communications has plans to expand efforts of this kind in the Asian region.

Click here for details regarding the BOP business in Indonesia.

Providing Services that Deliver Convenience and Peace of Mind

Developing a Wealth of Services in line with the Increasingly Widespread Use of the Internet in Daily Lives

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 conditions. Users also receive telephone and remote support should they experience a sudden computer-related problem. Moreover, for “Biz Hosting Mail & Web Economy,” a hosting service that delivers one of the industry’s highest levels of cost performance, we provide an optimal homepage access environment that is suitable for broadband services that continue to diversify due to their reliability, safety, and quality.

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

Strengthening Web Search Service Provider Suicide Prevention Measures

For Enhanced Anti-Suicide Measures Month in March, NTT Communications collaborated with companies providing Internet search services to strengthen pre-suicide measures through such search services. Specifically, for users who searched keywords related to a desire to commit suicide such as “I want to die,” links were posted urging the user to access pages listing information on help lines, including the National Center of Neurology and Psychiatry (NCNP)'s Center for Suicide Prevention, to provide useful information about suicide prevention.

Similar efforts had previously been partially put into effect by search service providers, but had been managed separately, depending on each individual keyword setting. On this occasion, it was possible to plan enhanced measures by using shared keywords created by the NCNP’s Center for Suicide Prevention.

Suicide prevention is one of society’s major issues. By alone becoming one catalyst for solving the problems of users in distress by ensuring that helpful information about suicide prevention can be readily accessed through Internet search services, it is hoped that this will trigger chances to save many lives.

Participating Businesses (Business name: Service name in random order)

NTT Communications Corporation: OCN
NTT Resonant Inc.: goo
NTT DOCOMO, Inc.: i-mode search, dmenuTM search
Excite Japan Co., Ltd.: Excite
NEC BIOLoire, Ltd.: BIOLoire
So-net Entertainment Corporation: So-net
NIFTY Corporation: @nifty
Yahoo Japan Corporation: Yahoo JAPAN
Rakuten, Inc.: Infoseek
Implementing Disaster Prevention and Public Media Fields Tests

"Tsunagi" project committee (Representative: NTT PC Communications Incorporated), an organization that strives to provide reconstruction support to areas affected by the Great East Japan Earthquake, commenced "disaster prevention citizen media field tests" from November 2011 with the cooperation of Ofunato City (Mayor Kimiaki Toda, Iwate Prefecture). Drawing on the experience and lessons learned from various disaster-stricken areas, these field tests were conducted using temporary housing facilities located within Ofunato City with the aim of pursuing research into disaster prevention systems.

Consideration regarding the undertaking of field tests was first premised on the recognition that public authority community wireless systems were inadequate as an information communication tool during the Great East Japan Earthquake. In addition to the need for media that can quickly relay information to as broad an area as possible at the time a disaster occurs, the importance of continuously using such media and to nurture a sense of familiarity also underpinned considerations.

Field tests entailed putting in place an environment in which 14 temporary housing facilities were provided with wireless LAN Internet access. Access was provided to all of the homes within three of the 14 temporary facilities. Applicants participating in field tests were supplied with information announcement systems. This system was installed in meeting places for shared use at the remaining 11 temporary facilities. IC cards were distributed to applicants with access and use of the system available by simply passing the card over the IC card reader. Moreover, trials were conducted involving collaboration with regional independent SNSs and the relay of information to the aforementioned temporary housing facility terminals, mobile phones that had been registered in advance, and disaster FM broadcasting stations, at the time broadcasts were being made through the public authority community wireless system run by Ofunato City. In this manner, the dissemination of disaster contact and other information that had previously relied solely on public authority community wireless systems could be concurrently broadcast using multiple media across the region, thereby conveying information in a timely fashion and the brodcast possible number of people. Furthermore, through the general use of this system, and as a means to ensure greater familiarity, this initiative was used for announcing the schedules of supermarket food vans and a wide range of lifestyle support activities including health recipes.

Field tests will continue through to October 2012. In the hope that these efforts will be of some help to people suffering in disaster-stricken areas. In addition to its use in wireless stations for disaster prevention, the critical need to maintain systems that can concurrently broadcast information and the importance of research into securing a continuous information platform during periods of disaster have received growing acceptance among local government authorities and the finance community. In fiscal 2011, plans are in place to develop a disaster prevention citizen media information platform in Ofunato City in earnest and to establish the NPO Disaster prevention and media promotion committee to take the lead in pushing forward this initiative.

Providing an 050 plus Service

NTT Communications launched its 050 plus service in July 2011. This service delivers 050IP phoning access via smartphone terminals and is designed to augment the Company's 050 IP Phone service through increased convenience. By simply installing a designated smartphone application, users are provided with easy 050 IP phoning access. Calls between 050 plus users are free of charge. Calls are also free to OCN. Phone and affiliated 050 IP phone providers (affiliated free call service providers totaled 270 with contracts in excess of three million as of March 31, 2011). Taking into consideration these features, calls can be made safely across a variety of life scenes both in and outside the home.

Efforts to enhance the convenience business customers through the use of this service are gathering pace. The 050 plus for Biz service, which delivers increased functions to business customers, was introduced from March 2012. In addition to the low-cost IP phoning offered through the 050 plus service, 050 plus for Biz provides increased convenience enabling businesses to bundle multiple telephone numbers into a single application and to receive a single combined invoice.
Providing a School System Platform Using Cloud-Based Education Support Services to the Yokohama City Board of Education

The Yokohama City Board of Education operates Japan’s largest school business-based system platform. NTT Communications began providing cloud services to this platform from fiscal 2011. In recent years, the need for ICT outsourcing as well as cloud computing aimed at promoting business continuity has grown rapidly. This is largely attributable to such factors as the review of large-scale natural disaster countermeasures and energy consumption. Under its digitization of education vision, Japan’s Ministry of Education has identified several key initiatives designed to improve the school education frontline. One such measure is the introduction of operating support systems that use advanced technologies including cloud computing at all schools by fiscal 2020. Particular emphasis is being placed on the use of a common system and uniform management of such wide ranging items as student and parent lists, records regarding attendance, health checks, academic results, and guidance reports. The City of Yokohama is actively promoting the digitization of school operations and records. This current school operating system is scheduled to come online at 148 schools within Yokohama during fiscal 2012. Ultimately, the system will cover over 300 schools and the records and information of 10,000 teachers and 190,000 students. NTT Communications has provided cloud service platforms encompassing such activities as the delivery of digital textbooks as a part of the Future School Promotion and Learning Innovation projects initiated by Japan’s Ministry of Internal Affairs and Communications and Ministry of Education, respectively. Drawing on this expertise, the Company will prepare new cloud services that address the dual needs of safety and efficiency and provide the same system platform.

Providing OCN IPv6 Services

Amid the growing need for IPv6 access services as a solution to the exhaustion of IPv4 addresses, OCN IPv6 was introduced as one of the world’s first IPv6 access services for general users. This trend gathered pace during fiscal 2011 with the launch of Flet’s Hikari Next (Internet IPv6 PPPoe access) in June 2011. With regard to OCN services that use existing NTT East and NTT West Pools’ Hikari Next access lines, the Company provides Internet access with IPv6 functions using IPv6 addresses free of charge. In order to promote the more familiar use of IPv6 addresses with respect to OCN services for the corporate sector, steps were taken to revise a variety of IPv6 charges from the same day. As a result, IPv6 services are now provided at the same fee structure as IPv4. Moreover, NTT Communications has newly introduced services that are IPv6 compatible for Super OCN Light Ether Access and Business OCN Burst Ether Access and is promoting increased use.

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. Through these and other initiatives, we are helping parents and children work with PCs and the Internet in a healthy and safe manner. Looking ahead, plans are in place to provide a site and information filtering service.

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.

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. Based on the child pornography website address lists provided by the ICSA, and as another initiative, steps were launched to block child pornographic images by each of the ISP providers in April 2011. In response, NTT Resonant is swiftly modifying the various search services that it operates. As Japan’s largest ISP, OCN, in particular, is taking the initiative. Every effort is being made to prevent the distribution of child pornography, which is considered the ultimate abuse of human rights, and to contribute to the safety and reliability of search services.

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The NTT Communications Group will continue to work closely with the ICSA as a part of efforts to prevent the distribution of child pornography. By advancing the knowledge gained through OCn's participation in child pornography project demonstration experiments organized by Japan's Ministry of Internal Affairs and Communications together with each ISP, work is being done to lower the barriers regarding introduction for small and medium ISPs that are yet to comply. These endeavors are geared to ensuring adoption by as many ISPs as possible.

### ICT Supporter

Amid the growing digitalization of schools and classrooms, the needs for teachers to take greater initiative in the use of ICT as well as increased support for ICT application continue to mount. In an effort to address these needs and issues, NTT Com CHEO is nurturing ICT supporters and providing human resources to promote the use of ICT during lessons taught at school.

Expertise in ICT is not the only skill required of ICT supporters. Of equal importance are communication skills when dealing with children and teachers. ICT supporters must be able to provide instructions and impart information in an accurate and easy-to-understand manner. Given the multitude of skills required to engage in school education, developing the right human resources is said to be difficult over a short period.

Accordingly, steps are being taken to foster and dispatch ICT supporters, who are capable of making an immediate impact at schools and classrooms, through a proprietary school education program. This program was created by NTT Com CHEO staff with considerable communication and instruction skills as well as know-how developed through the ICT skills and customer support operations that underpin "Com Master" (Dot Com Master) Internet certification.

Moving forward, the goal is to contribute to the development of children and students through support aimed at promoting ICT use in schools.

### 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 310,600 people had taken examinations by March 2012 with around 110,000 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 2012 goal is for 28,000 people to take the examination.

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 operations. 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 2011, there were approximately 1,900 CAVA operators. This system of home-based operations 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 2011, we introduced new support tools in an effort to build an environment in which staff could more easily work and endeavored to enhance the quality of response capabilities. In order to achieve a better balance between work and childcare, we continue to implement measures that help single parents become CAVA operators. This initiative is unique to NTT Com CHEO since its inception in fiscal 2009. Currently, we are considering steps to formally institutionalize these measures.

Moreover, we are collaborating with local governments to provide employment support and to assist job seekers to gain ICT skills and certification while increasing opportunities to work from home. 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. As a part of these efforts, we will expand operations beyond ISPs.
Features of CAVA
1. There are two types of CAVA operators. 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.

5. The network of CAVA staff distributed across the length and breadth of Japan will harness its strengths particularly in the context of BCPs. This entails various situations including the incidence of major disasters and pandemics.

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.

Masayumi 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.

Health Enhancement Assist Service Joint Field Trial

In February 2011, NTT Communications, NTT Resonant Inc. and boothlog 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 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 services usefulness for dieting and maintaining good health, and the positive effect that having to record everything eaten has on keeping down one’s weight.

NTT Resonant began providing health assist for business use as a part of its “go to healthcare” health management service menu from fiscal 2012 drawing on the results of field trials conducted in fiscal 2011. In addition to improving various aspects including the widely acclaimed calorie estimation function, we are looking to promote continued use as a smartphone application.

Participating 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.

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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

<table>
<thead>
<tr>
<th>Implementing Customer Satisfaction Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT Communications conducts annual “voice of customer” surveys to ascertain how its various services and business operations are evaluated by customers. These efforts to garner the opinions and needs of customers are a part of comprehensive measures aimed at further enhancing customer satisfaction.</td>
</tr>
<tr>
<td>In fiscal 2011, we received replies from approximately 1,600 companies. Of this total, more than 80% expressed their satisfaction towards each service field. At the same time, we were able to ascertain the strong customer needs for expanded services and higher quality in the global field.</td>
</tr>
<tr>
<td>Many respondents expressed their expectations of the Company as a cloud service operator. In response to these comments, we released the Biz Hosting Enterprise Cloud service.</td>
</tr>
<tr>
<td>Responding sincerely to the comments of customers, each and every employee will work in unison to continuously deliver innovative and highly reliable services going forward.</td>
</tr>
<tr>
<td>To this end, we will maintain an unwavering focus on improving the quality of every facet of our business activities.</td>
</tr>
<tr>
<td>(Examples of improvement activities)</td>
</tr>
<tr>
<td>· We maintain the basic policy of meeting the scheduling requirements of customers with respect to the opening of new lines. Line opening operations are conducted in consultation with customers.</td>
</tr>
<tr>
<td>· We work closely with partner telecommunications operators in developing countries to implement process improvements with the aim of reducing trouble when opening new lines. At the same time, we work to upgrade and expand customer support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCN Customer Feedback - Quickly Addressing Customer Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluations of NTT Plala Educate</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 the ensuing period, we have continued to receive approval for three consecutive years.</td>
</tr>
<tr>
<td>We received approval from the All Japan Parents and Teachers Association for Educate, our Internet access service for schools, as a recommended product. This helped raise the Educate brand value and the trust and sense of security felt by our customers toward this service. As of the end of March 2012, NTT Communications was the only ISP that provided free Web filtering for this kind of service. The uniqueness of Educate has also led to higher customer satisfaction.</td>
</tr>
<tr>
<td>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 an even safer Internet environment for children.</td>
</tr>
</tbody>
</table>
Simultaneous Acquisition of ISO 14001 and OHSAS 18001 Certification

NTT Plala simultaneously acquired ISO 14001 and OHSAS 18001 certification, the international standards for environmental as well as occupational health and safety management systems, respectively, at all of its places of business in December 2011. Certification under both standards was a first for the ISP industry.

As a company responsible for handling the personal information of its customers, NTT Plala had previously acquired ISO 27001 certification, the international standard for information security management, and has continued to take steps to improve its information security management systems. In recent years, the company has made further strides in fulfilling its responsibilities. In this regard, NTT Plala has accelerated efforts to practice management that takes into consideration environmental concerns, while securing the health and safety of its employees both physically and mentally. Ultimately, NTT Plala is endeavoring to consistently deliver safe and reliable services while being universally recognized as a company that takes to heart the environment and humankind. Against this backdrop, full-fledged efforts were launched to build management systems based on ISO 14001 and OHSAS 18001 from the previous year, which culminated in recent certification.

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, the company 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 efforts have been made to enforce these regulations to ensure that our websites are easily accessible to all users.

Responsibility for Delivering High-Quality Services

Providing Service Level Agreements (SLAs)

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.

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 ACF is a conference we have convened annually together with partner carriers from around the world since 2002 for the purpose of improving quality in the operation and delivery of international network services. Until now, the focus 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.
In fiscal 2011, the ACF was held in Kobe in November. The Forum was an opportunity to deliberate on quality improvement measures concerning the NTT Communications Group’s international Acstar Global Network Service, while at the same time sharing information on the impact of the Great East Japan Earthquake on communication services as well as recovery initiatives. The Forum was also distinguished by its lively discussion on operations based firmly on the customer’s perspective and efforts aimed at comprehensively improving the quality of services. As a result of these discussions, agreements were reached on those items required to enhance network platform quality. There was also a consensus among participating communications companies about the critical need to promote smooth communication with customers and to share information in order to enhance service quality. For these reasons, the policy was raised to build a real-time effective information distribution mechanism that is capable of gathering customer information.

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

- Maintaining Stable and Reliable Telecommunications Services
- Information Security in Telecommunications Services
- Using ICT to Solve Social Issues
- Faithfully Serving Our Customers
- Our Relationship with Society
- Our Relationship with Suppliers
CSR Report 2012

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

|| NTT Communications' Social Contribution Activities

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

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

Serving Local and International Communities

Donations for Disaster Relief Via the "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).

Participating in the "chokotto ikoto program"

NTT NavSpace Corporation, which operates the "Potora" Interactive point earning and ranking information website, has been participating in the "chokotto ikoto 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 ikoto program," funds are automatically paid to designated charity organizations whenever the Rakuten payment system is used. As a participant in this program, NTT NavSpace 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 NavSpace assumes responsibility for the donated funds, allowing Potora users to participate in the program simply by exchanging their points into cash. We will continue participating in this project.

Breakdown of Donations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan Guide Dog Association</td>
<td>¥35,108</td>
</tr>
<tr>
<td>Japan Marrow Donor Program</td>
<td>¥35,108</td>
</tr>
<tr>
<td>Plan Japan</td>
<td>¥35,108</td>
</tr>
<tr>
<td>Japan Cancer Society</td>
<td>¥35,108</td>
</tr>
<tr>
<td>Medecins Sans Frontieres (MSF) Japan</td>
<td>¥35,108</td>
</tr>
<tr>
<td>Total</td>
<td>¥175,840</td>
</tr>
</tbody>
</table>

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Contributing to Society through Websites

Through websites, the NTT Communications Group is engaged in a wide range of social contribution activities.

OCN, operated by NTT Communications, has established the “OCN charity for Guide Dogs” website. This website strives to raise awareness toward the importance of seeing-eye dogs, enables viewers to download contents, and has in place a point of contact to receive donations. In addition to this initiative, and as an ongoing activity, we donate a portion of the profits of OCN green to various NPOs and NGOs that work to find solutions to environmental problems. Since 2010, donations have been made on four occasions totaling ¥2,830,000.

The “Pink Ribbon Campaign 2011” run by NTT Resonant Inc. through the “goo” Internet portal is prominently displayed on the main “goo” website top page. In addition to upgrading and expanding the contents of the campaign page to include such features as a breast cancer examination appointment service, numerous efforts have been made to provide services to as many people as possible including the addition of a pink ribbon site for smartphones.

In future, it will become an important issue for the campaign to determine the kinds of initiatives that will connect activities to self examinations.

Group Social Contribution Activities through CSR Programs

The NTT Communications Group runs CSR programs that welcome participation from employees and their families.

One of major activities is the Chichibu Rice Terrace Revitalization Project. In addition to increasing environmental conservation awareness, these experiences provide opportunities for exchanges with regional areas and contributions to society.

Ecocap Movement

The NTT Communications Group has been a supporter of the NPO Ecocap Movement since February 2007. Among a number of initiatives, the Ecocap Movement strives to deliver vaccines to the children of the world through donations derived from the collection and sale of used bottle caps.

Used bottle caps are separated and collected as a resource. When sold to recycling contractors, every 800 caps is equivalent to ¥20 enabling the purchase and vaccination of one child in a developing country. Moreover, this movement helps reduce CO2 emissions (800 caps is equivalent to 6,300g of CO2 at the time of incineration as waste). In addition to contributing to society, this initiative also helps protect the environment.

In fiscal 2011, 2,838.5kg of caps was collected allowing the delivery of vaccinations to 1,419 children.

Activities related to the Great East Japan Earthquake

Core Business Initiatives Addressing the Great East Japan Earthquake

Since immediately after the Great East Japan Earthquake, collaboration between Group companies has enabled NTT Communications to provide support through its core businesses in a variety of forms toward realizing the soonest possible reconstruction of the affected areas. To ensure that ours does not end up as a temporary response to the disaster on the way to post-earthquake reconstruction, we will continue activities for everyone in the disaster-stricken areas.

Examples of Reconstruction Support Activities: Project Tsumugi Centered on NTT PC Communications (NTTPC)

1. Providing an Identity Confirmation System

Following the large number of cases of missing persons whose safety could not be confirmed in the aftermath of the disaster, NTTPC hastily constructed and released an identity confirmation system. Started in Iwate Prefecture on May 30, 2011, the missing persons system was extended to cover Miyagi and Fukushima prefectures in July. Having been accessed by more than 40,000 people on the first day of its release alone, the system was used by many people in the disaster-affected areas and served its purpose until ended in March 2012.

2. Supporting Disaster-Affected Areas through Field Trials of Disaster Prevention and Citizens’ Media

Continuing its activities toward reconstruction in the disaster-affected areas amid ongoing aftershocks, and receiving information that daily life was posting serious challenges, NTTPC worked with industry, government and academia on an empirical structure of disaster prevention and citizens’ media. These efforts are being utilized to look into the nature of a new regional disaster prevention system that will take into account the lessons learned from the Great East Japan Earthquake.
3. Interacting with Children

In the disaster-affected areas, children are living amid concerns about the future and their school attendance. In response, NTTPC is working with student volunteer organizations operating in each area and supporting distance learning that utilizes such methods as participation in local festivals in each area and video conferencing.

4. Conducting Computer Classes

In fiscal 2012, NTTPC held computer classes as support activities in the disaster-affected areas and encouraged learning support initiatives. In the city of Ofunato, which conducted disaster prevention and citizens’ media field trials, classes billed as Project Tsunagi were held a total of eight times from July to September 2012, at which 160 attendees gathered.

Donations to the Great East Japan Earthquake Relief Fund

<table>
<thead>
<tr>
<th>Donation of relief money</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Raised money through OCN Pay ON (NTT Communications) ¥90,937,700 (ended February 10, 2012)</td>
</tr>
<tr>
<td></td>
<td>• Raised money through OCN Point Talk Program (NTT Communications) ¥77,037,200 (ended February 29, 2012)</td>
</tr>
<tr>
<td></td>
<td>• Kao fund-raising (NTT Re warranty) ¥34,565,865 (during fiscal 2011)</td>
</tr>
<tr>
<td></td>
<td>• Donations collected via Plate Internet connection service and Hitachi TV video distribution service (NTT Plate) ¥9,190,875 (during fiscal 2011)</td>
</tr>
<tr>
<td></td>
<td>• Raised money through the iMoney Choo Service (NTT iMoney) ¥10,413,000 (during fiscal 2011)</td>
</tr>
</tbody>
</table>

Ongoing Activities in Support of Disaster-Stricken Areas by Employees

NTT Communications is positively supported the reconstruction of disaster-stricken areas following the Great East Japan Earthquake through endeavors in and outside its mainstay business activities.

In fiscal 2011, the Group worked in unison to support ongoing volunteer activities mainly in the area around Sendai, Akita, and Iwate Prefecture. Activities included the removal of rubble and floating debris.

In addition to putting in place systems that allowed employees to easily participate in volunteer activities while actively promoting local community reconstruction efforts, we were successful in creating opportunities to meet the requests of employees eager to provide their support as volunteers.

In fiscal 2012, we will continue to engage in reconstruction activities in those areas affected by the Great East Japan Earthquake.
Our Relationship with Suppliers

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 participate in transactions on an equal footing based on mutual respect for one another'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 2011, we entered into electronic agreements with around 60 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 standards 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 2011, we also worked to develop a shared understanding of trends related to the promotion of green procurement with Group companies through two sessions of the Global Environmental Protection Promotion Sub-committee.

Moving forward, we plan to further raise awareness of the importance of promoting green procurement among Group companies. Through these and other means, we intend to expand green procurement as a group.

Click here for details regarding the green procurement.

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Special Feature on the Environment

Protecting the Environment
Building Bridges that Help Reduce Environmental Impact

Linking each of the technology and front line perspectives with an eye to our planet’s future; our efforts continue to gather pace in Japan and worldwide.

KEY FIGURE
Fiscal 2012 CO₂ Emission (Target)

278,000 tons-CO₂

*1 Unless new energy-saving technologies and facilities, we will contain the amount of CO₂ emissions to levels recorded in the previous fiscal year.

KEY ENGAGEMENT

- Identify, actively adopt, and expand green ICT technologies
- Work toward zero emissions by promoting recycling
- Preserve biodiversity through business activities

JAPAN

Contributing to the creation of a sustainable society through advanced data centers that adhere strictly to a policy of CO₂ reduction

Toward Increasingly Green Data Centers
As the use of cloud services becomes increasingly widespread and the role of data centers that underpin the ubiquitous society gain in prominence, the efforts on efforts to build a low-carbon society are growing in tandem. The NTT Communications Group recognizes data centers as a key component in the pursuit of environmental management by ICT companies and is actively promoting green initiatives in this area.

NTT Communications’ Data Centers Bring Together Advanced Technologies
The density of ICT equipment including servers and storage devices continues to increase. This is in turn pushing up the need for the efficient removal of the large amounts of concentrated heat that is generated. NTT Communications has introduced highly efficient air conditioning systems as well as AISLE CAPPING™ airflow control solutions that separate the cold air used to cool ICT equipment from warm air emissions and cooling techniques that employ external air.

In a recent development, SmartDASH™ air conditioning control systems are being trialed and assessed at data centers in Japan and overseas. These SmartDASH systems are used to ensure efficient air conditioning based on temperature measurements taken at multiple points within server rooms. Initial results indicate reductions in air conditioning power consumption of up to 20%. Taking into account investment— as well as cost saving and other considerations, steps will be taken to promote a full-scale introduction in the future. Expectations are for a cutback in the volume of CO₂ emissions of approximately 6,000 tons.

Supercooling Improvements Using SmartDASH

Before use

After use

Excessive cooling (below the established lower limit)
Correct temperature (temperature setting between 18°C and 24°C)

Green ICT
GLOBAL

Expanding Green Innovation Worldwide

Further Enhancing Environmental Performance

Environmental performance demands on data centers extend well beyond the reduction of CO₂ emissions. Among a wide spectrum of requirements, data centers are expected to help offset the use of substances that impose a burden on the environment and incorporate the need for biodiversity conservation. The NTT Communications Group positions environmental protection as a common global concern and is actively applying appropriate technologies at overseas data centers.

Amassing Cutting-Edge Technologies in Singapore

Singapore Serangoon Data Center, which opened in April 2012, not only focuses on reducing power consumption through the use of such facilities as water cooled air conditioning systems that offer high cooling efficiency and building energy management systems, but also implements the following wide-ranging initiatives.

1. The effective use of water

   Recycled water is used as a coolant for air conditioning systems and collected rainwater is used to nourish the plant life within the facility site. In this manner, every effort is made to use recycled water and rainwater as a part of ongoing measures aimed at conserving water resources.

2. The reduction of environmental impact

   In addition to an unwavering commitment to recycling beginning with the sorting of waste, the Center uses rotary uninterruptible power supply (UPS) systems as opposed to lead storage batteries as a part of comprehensive efforts to curtail the use of substances that impose a burden on the environment.

3. Consideration for biodiversity

   The flora at the construction site has been replanted within the facility site. Through this and other initiatives, ample consideration was given to preserving plant life throughout the Data Center construction process.

Based on these wide-ranging initiatives, the Data Center is attracting significant acclaim as a cutting-edge, environmentally conscious data center that sets the global standard for the future. Looking ahead, the NTT Communications Group will continue to contribute to data center green innovation.

Enjoying an Outstanding Global Reputation

Singapore Serangoon Data Center has earned a host of globally recognized accreditations, one of which is the Green Mark Platinum Award, for special building under the BCA Green Mark Scheme.

BCA Green Mark Scheme

An evaluation system for environmental consideration in building design, the Scheme is administered by the Building & Construction Authority, a statutory board under the Ministry of National Development, Singapore.

Rotary UPS system that helps to substantially reduce environmental impact

Actively utilizing rain and recycled water

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Protecting the Environment  Detailed Report

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 services 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
  - Green ICT Vision 2020
  - Fiscal 2011 Results and Fiscal 2012 Targets
  - Fiscal 2011 Material Flow
  - Promotion Framework and Fiscal 2011 Initiatives
  - Acquiring ISO 14001 Certification
  - Environmental Audits and Environmental Surveys
  - Environmental Accounting in Fiscal 2011
  - Green Procurement Guidelines
  - Environmental Education Initiatives
  - Objective-Level-Based Training
  - Environment Day Established

- **Preventing Global Warming**
  - Fiscal 2011 Initiatives
  - Fiscal 2011 Results and Fiscal 2012 Outlook
  - Electricity-Saving Measures in the Office
  - Actively Promoting Work-Style Reform
  - Adopting the Latest Cooling Technologies
  - Introducing Solar Power Generation Systems
  - Installing LED Lights at Data Centers
  - Introducing the NTT Group Energy Conservation Performance Guidelines
  - Preventing Air Pollution and Promoting Energy Conservation through Electric Propulsion Ships
  - Planting Rooftop Gardens and Green Walls
  - The Newest Green Data Centers
  - Construction of the Tokyo No. 5 Data Center
  - Office Building Initiatives
  - Electronic Billing Initiative
  - Company Vehicle Initiatives
  - Compliance with the Revised Law Concerning the Rational Use of Energy and Local Government Ordinances

- **Reducing Environmental Impact through Our Services**
  - Green ICT Initiatives
  - Environmental Solutions Label System
  - Acquiring the eco-ICT Mark
  - Participating in Smart Industrial Estate Demonstrations Targeting Southeast Asia
  - Developing Billing Platforms for EV Sharing
  - eco-go
  - go Green Label
  - Green OCN

- **Reducing Waste**
  - Fiscal 2011 Initiatives
  - Recycling of Dismantled Telecommunications Equipment
  - Recycling of Construction Waste
  - Recycling of Office Waste
  - Adhering Strictly to Proper Industrial Waste Disposal Operations
  - Vending Machines that Allow Use of a Personal Cup
  - Effectively Using the Waste from Cafeterias and Dining Facilities
  - Reducing Usage of Paper for Business Purposes
  - Providing an Online CSR Report

- **Biodiversity Conservation**
  - Biodiversity Conservation Action Guidelines
  - Recycling Water
  - Maintaining Vegetation
  - Ecology in the Ocean
  - Caring for Nature Reserves
  - Operations Based on Guidelines
  - Special Feature on Biodiversity on the “eco-go! Portal”

- **Promoting and Using Internal Green ICT**
  - Reducing the Amount of Paper Consumption through Tablet Terminals
  - Promoting Use of the Company’s Internal Cloud
  - Reducing Employee Transfers through Remote Access and Thin Client Services
  - Promoting Cooperation in Efforts to Conserve Electricity Using Thin Client Services

- **Preventing Environmental Pollution**
  - Complying with Environmental Legislation and Regulations
  - Air Pollution Countermeasures
  - Putting in Place an Eco Car Introduction Policy
  - Ozone-Depleting Substance Countermeasures
  - Asbestos Countermeasures
  - Storage and Management of PCBs
  - Strengthening Storage and Management in the Anticipation of Emergency Situations

- **Reporting to Public and Other Authorities**
  - The Law Concerning the Rational Use of Energy
  - Tokyo Metropolitan
  - Kanagawa Prefecture
  - Yokohama City
  - Saitama Prefecture
  - Nagoya City
  - Shizouka Prefecture
  - Kyoto Prefecture
  - 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.

NTT Communications Group Global Environmental Charter

The NTT Group has established the NTT Group Global Environmental Charter to promote groupwide 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.

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 resources 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).

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.

Click here for details regarding the Green ICT Vision 2020.

---

### Fiscal 2011 Results and Fiscal 2012 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-CO₂ (a reduction of more than 15%, from the fiscal 2005 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 2011, we accelerated Group-wide efforts aimed at reducing environmental impact and protecting biodiversity. In specific terms, we took steps to expand management on an individual application basis for each building and site, established guidelines relating to biodiversity conservation, initiated new measures aimed at reducing greenhouse gases, promoted the introduction of low emission vehicles in order to curtail pollution and actively cutback the use of paper. Through these endeavors, we achieved considerable results across the Group.

### Environmental Impact Reduction Initiatives, Targets and Achievements in Fiscal 2011

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Telecom equipment</td>
<td>252,000 t-CO₂</td>
<td>252,000 t-CO₂</td>
<td></td>
<td>318,000 t-CO₂ or less*1</td>
<td></td>
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<tr>
<td></td>
<td>- Outdoor units for air conditioners and filter cleaning: reduction of 3,333 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Turning off idle equipment: reduction of 677 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Upgrading older air conditioners: reduction of 206 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Raising temperatures slightly in machine room cooling systems: reduction of 777 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Close wireless stations: reduction of 60 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Upgrading facilities (higher capacity and conversion to DC): reduction of 1,187 t CO₂</td>
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<tr>
<td></td>
<td>- Reducing use of other facilities as a result of service elimination: reduction of 1,504 t CO₂</td>
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<tr>
<td></td>
<td>- Installing solar power systems: reduction of 74 t CO₂</td>
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<tr>
<td></td>
<td>Target: 252,000 t-CO₂ or less*1</td>
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</tr>
<tr>
<td></td>
<td>- Outdoor units for air conditioners and filter cleaning: reduction of 3,333 t CO₂</td>
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<tr>
<td></td>
<td>- Turning off idle equipment: reduction of 416 t CO₂</td>
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<tr>
<td></td>
<td>- Upgrading older air conditioners: reduction of 89 t CO₂</td>
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<tr>
<td></td>
<td>- Raising temperatures slightly in machine room cooling systems: reduction of 520 t CO₂</td>
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<tr>
<td></td>
<td>- Close wireless stations: reduction of 617 t CO₂</td>
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<tr>
<td></td>
<td>- Upgrading facilities (higher capacity and conversion to DC): reduction of 651 t CO₂</td>
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</tr>
<tr>
<td></td>
<td>- Reducing use of other facilities as a result of service elimination: reduction of 2,730 t CO₂</td>
<td></td>
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<tr>
<td></td>
<td>- Installing solar power systems: reduction of 70 t CO₂</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Target: 318,000 t-CO₂ or less*2</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>- Reducing of more than 15% from the fiscal 2005 level</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Offices</td>
<td>29,000 t-CO₂</td>
<td>29,000 t-CO₂</td>
<td></td>
<td>29,000 t-CO₂ or less**1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Installing reflector lights and adopting automatic light level adjustment systems</td>
<td></td>
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<tr>
<td></td>
<td>- Lowering blinds before leaving the office, and ensuring that lights are turned off when not in use</td>
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<tr>
<td></td>
<td>- Continuous promotion of dressing warmer in winter and cooler in summer</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling rate for dismantled telecom equipment</td>
<td>Target: At least 99%</td>
<td>92.7%</td>
<td>Improving the recycling rate for glass and ceramic scrap (glass scrap, FPCB, and ball insulations)</td>
<td>Target: At least 94%</td>
<td>94.1%</td>
</tr>
<tr>
<td>Recyclability rate for construction waste</td>
<td>Target: Specified materials: At least 95%</td>
<td>95.4%</td>
<td>Other: At least 75%</td>
<td>Target: Specified materials: At least 95%</td>
<td>95.4%</td>
</tr>
</tbody>
</table>

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### Environmental Impact of Business Activities

#### Fiscal 2011 Material Flow

![Material Flow Diagram](image)

- **Customers**: Business process
  - Purchasing
    - Numbers of orders processed: 1,291,000
    - Total order revenue: 12,080 million yen
  - Telecommunications services
    - Power: 308.6 GWh
    - Fuel: 20,049,000 ton
    - Gas: 44.72 million m³
    - Heat: 2.27 million MJ
  - Office
    - Power: 52.5 million kWh
    - Fuel: 143.558 m³
    - Office paper: 425 tons
  - Sales
    - Paper: 4,000 tons
    - Fuel: 238 ton
    - Fuel (automobiles): 44,000,000 liter

- **Environmental Impact Reductions from ICT Usage**
  - Greenhouse gases
    - Power: 292,709 CO₂
    - Fuel: 5,693 CO₂
    - Gas: 108,920 CO₂
    - Heat: 2,060 CO₂
    - Industrial waste: 1,426 tons
  - Final disposals of wastes
    - General waste: 336 tons
    - Industrial waste: 154 tons
  - Greenhouse gases
    - Power: 21,000 CO₂
    - General waste: 1,470 tons
    - Industrial waste: 612 tons
  - Final disposals of wastes
    - General waste: 98 tons
    - Industrial waste: 40 tons
  - Greenhouse gases
    - Fuel: 1,000 CO₂
  - Water: Drinking Water: 527 units
  - Equipment and packaging: 20,771 units
  - Waste disposal from optoelectronic equipment: 13,583 units
  - Waste disposal from telecommunication equipment: 1,135 kilograms

*Click here to view an enlarged diagram summarizing inputs and outputs of the NTT Communications Group for fiscal 2011.*

### Environmental Management Structure

#### Promotion Framework and Fiscal 2011 Initiatives

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, Reducing 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. Our environmental management structure in Japan comprises 14 companies representing a decrease of one company and an increase of one company since fiscal 2010.
Acquiring ISO 14001 Certification

In addition to the one company that acquired certification in the previous year, six companies within the NTT Communications Group had acquired ISO 14001 certification as of March 31, 2012. 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. The broad range of initiatives 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

<table>
<thead>
<tr>
<th>ISO 14001-certified Company</th>
<th>Date of Certification</th>
<th>Status of Initiatives</th>
<th>Related Company Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Dept.</td>
<td>October 1999</td>
<td><strong>Promotion of green procurement</strong>&lt;br&gt;<strong>Cleaned a park in Tokyo</strong>&lt;br&gt;<strong>Held a rummage sale of goods brought in by employees, donating the proceeds to the Japan Fund for Global Environment</strong></td>
<td>Please click here for details on NTT Communications Corp. environmental protection activities</td>
</tr>
<tr>
<td>Solution Services Dept. (Engineering Division I, Engineering Division II, Planning Division)</td>
<td>March 2004</td>
<td><strong>Provided ICT solutions, such as video conferencing systems, that help achieve a low environmental impact society</strong>&lt;br&gt;<strong>Created environmentally friendly proposals and designs</strong>&lt;br&gt;<strong>Ensured proper disposal of industrial waste</strong>&lt;br&gt;<strong>Enhanced employee awareness of the environment through employee seminars (hold annually) and other activities</strong></td>
<td></td>
</tr>
<tr>
<td>NTT World Engineering Marine Corp.</td>
<td>July 2001</td>
<td><strong>Reduced fuel consumption of the vessels that lay submarine cable by implementing an energy-saving operation policy</strong>&lt;br&gt;<strong>Implemented paper usage reduction policies, including introducing paperless meetings (using PCs)</strong>&lt;br&gt;<strong>Promoted introduction of video conferencing systems</strong>&lt;br&gt;<strong>Ensured proper disposal of industrial waste</strong>&lt;br&gt;<strong>Improved the environmental awareness of all employees through education</strong></td>
<td>Please click here for Environmental Activities</td>
</tr>
<tr>
<td>Company</td>
<td>Date</td>
<td>Actions</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
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<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>NTT PC Comms. Inc.</td>
<td>November 2005</td>
<td>Implemented a range of power-saving measures in office buildings, devised power consumption reductions by 33% from the previous fiscal year.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Environmentally friendly data center employing solar power, DC power supply and rooftop greenery.</td>
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<tr>
<td></td>
<td></td>
<td>Reduced paper usage through the introduction of multi-function printers by 21% from the previous year.</td>
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<tr>
<td></td>
<td></td>
<td>Reduced final waste disposal rate by 21% from the previous fiscal year.</td>
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<tr>
<td></td>
<td></td>
<td>Conducted Satoyama Forest Preservation Activities in Shiro, Chiba Prefecture and the Minamiakawachi district of Osaka Prefecture as well as environmental protection.</td>
<td></td>
</tr>
<tr>
<td>NTT BizLink, Inc.</td>
<td>March 2007 (company-wide)</td>
<td>The ordering rate for environmentally friendly pamphlets reached 100% for the fourth year in a row.</td>
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<tr>
<td></td>
<td></td>
<td>Reduced copy paper usage by 16% from the previous year.</td>
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<td></td>
<td></td>
<td>Reduced the amount of office supplies purchased by 44% from the previous year.</td>
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<td></td>
<td></td>
<td>Reduced electricity usage by 9% from the previous year.</td>
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<td></td>
<td></td>
<td>Achieved significant reductions of 50% against a summer season reduction target of 30% and 34% against a winter season target of 15%.</td>
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<td></td>
<td></td>
<td>Participated in the Ecocool Movement of collecting and selling used plastic bottle caps to fund vaccines (collected enough bottle caps for 81 vaccines doses).</td>
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<tr>
<td></td>
<td></td>
<td>Implemented a training session on greenhouse gas emissions tracing led by an external guest instructor, as well as an internal ESG training seminar.</td>
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</tr>
<tr>
<td>NTT Fanet Systems Corp.</td>
<td>April 2007</td>
<td>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.</td>
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<tr>
<td></td>
<td></td>
<td>Reduced paper usage by introducing certified printers, encouraging double-sided and reduced-size printing.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Reduced paper usage by introducing certified printers, encouraging double-sided and reduced-size printing.</td>
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<tr>
<td></td>
<td></td>
<td>Promotion of green procurement.</td>
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<td></td>
<td></td>
<td>Promotion of green procurement.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Reused and recycled all unnecessary PCs.</td>
<td></td>
</tr>
<tr>
<td>NTT Plala Inc.</td>
<td>December 2011</td>
<td>Implemented energy savings by taking power-saving measures, such as the removal of some lighting, summer air-conditioning limits and introducing dumb terminals (saved on power by more than 21% from the previous fiscal year).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced paper usage by encouraging double-sided and reduced-size printing (by more than 15% from the previous year).</td>
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<tr>
<td></td>
<td></td>
<td>Promoted eco-certification levels.</td>
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<td></td>
<td></td>
<td>Twice implemented a clean-up program in the area surrounding the office building.</td>
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<td></td>
<td></td>
<td>Participated in campaigns to deter smoking on the street and littering organized by Tokyo's Toshima Ward.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Participated in the Ecocool Movement.</td>
<td></td>
</tr>
</tbody>
</table>

As of March 31, 2012
Figures inside parentheses indicate actual results from fiscal 2011.
Environmental Accounting

Environmental Accounting in Fiscal 2011

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 2011 was approximately 2,583 million yen, consisting of around 1,343 million yen in investments and around 1,040 million yen in expenses. This represented a decrease of around 120 million yen compared with the previous fiscal year. On the other hand, the economic benefits derived from the environmental conservation measures in fiscal 2011 included 188 million yen in revenue from optical cable sales and 313 million yen gained from the 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 Mypage* website helped reduce mailing costs and paper usage, generating cost savings of approximately 540 million yen. New equipment purchases were reduced 682 million yen by reusing equipment. As a result, overall economic benefits remained on par with those of the previous fiscal year at around 1,622 million yen.

* 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 e-mail 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)

<table>
<thead>
<tr>
<th>Category</th>
<th>Key measures</th>
<th>Investment FY2010</th>
<th>Investment FY2011</th>
<th>Expenses FY2010</th>
<th>Expenses FY2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Business area cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Pollution prevention costs</td>
<td>Asbestos removal and disposal, etc.</td>
<td>1,750.5</td>
<td>1,234.3</td>
<td>629.2</td>
<td>498.1</td>
</tr>
<tr>
<td></td>
<td>Oil tank facility for engine generator</td>
<td>477.0</td>
<td>421.7</td>
<td>23.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Breakdown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Global environmental conservation costs</td>
<td>Maintenance expenses for air-conditioning facilities for machinery rooms</td>
<td>1,270.0</td>
<td>822.5</td>
<td>109.8</td>
<td>82.1</td>
</tr>
<tr>
<td></td>
<td>Air-conditioning facilities for machinery rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Resource circulation costs</td>
<td>Waste disposal and reuse expenses</td>
<td>-</td>
<td>-</td>
<td>496.3</td>
<td>392.9</td>
</tr>
<tr>
<td>(2) Upstream / Downstream costs</td>
<td>Mypage system improvements</td>
<td>11.8</td>
<td>108.9</td>
<td>7.0</td>
<td>0.6</td>
</tr>
<tr>
<td>(3) Administration costs</td>
<td>GREENING of buildings: usage fees for environmental information system</td>
<td>-</td>
<td>-</td>
<td>91.6</td>
<td>94.3</td>
</tr>
<tr>
<td>(4) R&amp;D costs</td>
<td>NTT Communications' portion of holding company's environmental R&amp;D expenses</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>110.0</td>
</tr>
<tr>
<td>(5) Social activity costs</td>
<td>Donations to environmental conservation organizations</td>
<td>-</td>
<td>-</td>
<td>9.0</td>
<td>26.2</td>
</tr>
<tr>
<td>(6) Environmental remediation costs</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>300.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,760.3</td>
<td>1,343.2</td>
<td>737.7</td>
<td>1,040.7</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>98.5</td>
<td>108.2</td>
</tr>
<tr>
<td>Cost reductions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reductions in expenses derived from measures such as reduced electricity usage</td>
<td>266.1</td>
<td>312.9</td>
</tr>
<tr>
<td>Reductions in new item purchases generated by equipment reuse</td>
<td>647.0</td>
<td>681.8</td>
</tr>
<tr>
<td>Decrease in postal and paper costs from utilization of Mypage</td>
<td>540.3</td>
<td>458.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,643.0</td>
<td>1,621.6</td>
</tr>
</tbody>
</table>

(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.
Promoting Green Procurement

Green Procurement Guidelines

NTT Communications issued the second version of its Guidelines for Green Procurement in January 2008. 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 426 suppliers had been assessed as of the end of March 2012.

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. From fiscal 2010, we have continued to promote 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 is being expanded to the entire Group.

Status of Green Procurement and Green Purchasing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Green procurement of goods excluding office supplies (1,000 units)</td>
<td>2760</td>
<td>1520</td>
<td>1270</td>
<td>1220</td>
</tr>
<tr>
<td>Green procurement of goods excluding office supplies (1,000 units)</td>
<td>560</td>
<td>510</td>
<td>470</td>
<td>300</td>
</tr>
</tbody>
</table>

[Specific Case Study] Green Procurement of Office Paper

NTT Communications has continued to take into consideration and maintain a focus on environmental concerns in the procurement and use of office paper. In specific terms, the ratio of recycled waste paper to the total amount of paper consumed is 50.06%. 100% of the remaining 49.94% is environmentally conscious virgin pulp.

Environmental Education

Environmental Education Initiatives

Environmental 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 2011, as part of the Green with Team NTT initiative, we implemented a range of environmental awareness activities and environmental education, including cleanup activities focusing on waterways and coastal regions. Among a host of other endeavors, we participated in the Chichibu Rice Terrace Revitalization Project as well as the ecocap movement 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. In particular, we received a number of ideas this summer on how to save electricity. Moving forward, 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.

Idea: put forward on how to conserve electricity:

- Employees voicing their commitment to saving electricity each morning
- Consolidating areas where lighting is used
- Utilizing paper and Japanese fans
- Operating vending machines on alternative floors only
- Ensuring that computers are set at power saving mode

Environment Day Established

The NTT Communications Group has designated 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.
Preventing Global Warming

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 CO₂ emissions from business activities, through to energy savings by offices.

In fiscal 2011, each and every employee within the NTT Communications Group worked diligently to implement a variety of measures aimed at conserving energy at its nationwide office, telecommunications, and data center buildings in the aftermath of the earthquake disaster. This helped significantly reduce the amount of electricity consumed as well as CO₂ emissions.

Fiscal 2011 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 2011, we upgraded to more energy-efficient air-conditioning units to improve the overall efficiency of air-conditioning, which accounts for around 40% of electricity consumption, while using conventional methods such as the cleaning of external units and filters.

We also implemented innovative measures from the operational front-line, such as simple aisle capping that keeps IT equipment racks cool. Furthermore, we introduced on a test basis new technologies such as SmartDASH, a smart system that innovatively and automatically controls air-conditioning units. As we have been able to confirm that this system is having a greater than expected effect in reducing CO₂ emissions, we are defining our air-conditioning energy saving policy and are planning its nationwide deployment from fiscal 2012. In terms of purchasing renewable energy, we added a small 30KW solar system and are operating at 192KW.

With regard to office buildings, the implementation of a range of energy-saving measures throughout Japan, not only in summer but as much as possible throughout the year, led to a large reduction in CO₂ emissions.

Fiscal 2011 Results and Fiscal 2012 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 2011, strong performance in our data center business saw CO₂ emissions from telecommunications facilities increase steadily. However, due to such factors as the ongoing upgrade of air conditioning to more efficient systems, the suspension of operations and dismantling of unnecessary facilities, the renewal and shift to energy-saving equipment and the enforcement of stipulations under 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 10,000 t-CO₂ from fiscal 2010 to 252,000 t-CO₂.

Emissions of greenhouse gases other than CO₂ saw mixed results compared with fiscal 2010 levels, with the following results: CH₄: 1.2 t-CO₂ equivalent (down 33.1 t-CO₂ equivalent); NOₓ: 4.99 t-CO₂ equivalent (down 60.5 t-CO₂ equivalent); and HFC: 6.9 t-CO₂ equivalent (up 6.9 t-CO₂ equivalent). The total amount of electricity purchased in fiscal 2011 was 770 million kWh (down 20 million kWh from the previous fiscal year), while 236,000 kWh was generated in-house using renewable energy sources.

In fiscal 2012, we will introduce SmartDASH™, Aisle Capping™, and Blank Panel solutions at our telecommunications facility buildings and data centers. This initiative is in line with our policy to conserve energy through the efficient use of air-conditioning systems and forms part of our efforts to reduce CO₂ emissions. In addition to implementing ongoing improvements to our 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.

Reduction of about 15% in air conditioning power consumption (approximately 16% reduction for an entire building) from the synergistic effect of the “SmartDASH + Aisle Capping + Blank Panel” air conditioning solution

1. SmartDASH

- Trials were conducted at data centers in fiscal 2011. Areas where temperatures were below required levels were clearly identified through a process of visualization. By making the necessary adjustments, we were able to reduce annual air conditioning electricity consumption by approximately 15%. Moreover, we have successfully achieved a projected reduction in electricity consumption across the entire building through the complementary use of blank panel, aisle capping and other initiatives.

- In fiscal 2012, we plan to introduce SmartDASH to around 20 telecommunications facilities and data centers mainly in the Kantō area.
2. Aisle Capping

Under the aisle capping solution, aisles are enclosed by sidewalls using vinyl-type materials at the end of each aisle and by a ceiling over each aisle. This serves to provide an efficient air conditioning environment by separating the intake (low temperature) and emissions (high temperature) air from IT equipment. In addition, this solution enables a reduction in the period required for work as well as costs by streamlining conventional component and material requirements.

3. Blank Panel

Blank panels positioned to block off unused space at the front portion of server racks increase cooling efficiency within each rack.
CO₂ Emissions from Business Activities

(Unit: 10,000 t CO₂)

- Fuel for corporate vehicles and consumption of heavy oil and gas
- Electricity consumption (emission coefficient see note 1)
- Electricity consumption (emission coefficient see note 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.)

Note 1: The CO₂ emission coefficient in the dark blue bars is 0.978 kg CO₂ per kWh.
Note 2: The CO₂ emission coefficients used in the light blue bars are for electric power companies.
Note 3: Through to fiscal 2007, CO₂ emissions from other telecommunications operators (telecommunications facilities) inside our buildings have been included in the calculation. However, beginning in fiscal 2008, only the emissions from facilities (excluding those from other telecommunications operators) are included.

Other Greenhouse Gas Emissions (Converted to CO₂ Equivalent)

(kt CO₂ equivalent)

(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.)

Percent change from FY 2010: -58.0%

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.)

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.)
Electricity-Saving Measures

Electricity-Saving Measures in the Office

The NTT Communications Group aims to save as much electricity as possible at its office, since it will be difficult to reduce electricity usage significantly at data centers and telecom buildings, which are required to operate stably. During the summer months, the Group targeted a year-on-year reduction in electricity consumption of 30%. Over the period in question, the Group accordingly undertook a variety of measures. For example, every effort was made to reduce the use of air conditioning, cut back the number of lamps and lights employed, and curtail elevator operating rates. In this manner, the NTT Communications Group adhered strictly to a policy of electricity consumption reduction through its office automation and other equipment. Thanks largely to these endeavors, the Group achieved an approximately reduction in electricity consumption measured in kWh of approximately 42% at its three principal Hibiya, Shiodome, and Tamachi buildings. Focusing on OA electricity-saving initiatives, steps were taken to leverage a Group-wide PC management platform to automatically amend the electricity-saving settings on computers. At its Hibiya Building, NTT Communications reported an average Down approx. 23% cutback in electricity consumption measured in kW.

After receiving requests from the government of Japan and domestic utilities companies to reduce electricity consumption over the winter period, the NTT Communications Group also implemented measures undertaken during the summer over the period from December 1, 2011 to March 31, 2012 in a manner that did not overly impact its business operations.

Active Promoting Work-Style Reform

In response to the measures to save power in the summer, the NTT Communications Group actively made changes to work patterns with a view to reducing the power consumed by air-conditioning, which is said to account for around 50% of an office building’s power consumption. These changes included the implementation of daylight saving time, which brought forward the start of business over a certain period, the taking of a unified company summer vacation, and Biz Desktop Pro, by which working from home to coincide with air-conditioning stoppages was introduced. These moves realized power-saving measures that showed consideration for minimizing air-conditioning use, such as operations shutting down from 5 p.m. onward on weekdays, holidays and during the Bon holiday period (August 13-21) as well as partial limitations on individual air-conditioning.

Initiatives related to Telecommunications Facilities

Adopting the Latest Cooling Technologies

We introduced a natural refrigerant circulation cooling system that employs outdoor natural air (with the exception of summer) to the exterior building walls at our Tokyo No. 5 Data Center. This initiative aims at promoting harmony with nature and eliminating the wasteful consumption of electricity through the use of air conditioning equipment. This air conditioning system is integrated with the building and uses indirect exterior air to reduce electricity consumed by air conditioning and CO2 emissions. We project a reduction in air conditioning CO2 emissions by 2% (4518-CO2 per year). The cables running beneath and from the floor are used to channel the flow of cool air resulting in a sealing and refrigeration effect.
Introducing Solar Power Generation Systems

Solar panels generating 182 kilowatts are being installed on the roofs and in the walls at data centers within the Tokyo metropolitan area. The generated electricity is used for the lighting in common areas of the data centers. In the current fiscal year, there are plans to introduce a new solar power system generating around 110 kilowatts.

NTT Communications is aiming to expand the use of renewable energy and, in addition to the installation of solar power generation systems, plans the ongoing disclosure of information on the amount of power generated.

In fiscal 2011, we generated 244,180 kWh of electricity. This translates into a reduction of approximately 90.7 tons of CO₂, equivalent to the amount of CO₂ absorbed by 6,477 Japanese cedar trees in one year. The introduction of solar power generation—not only in Japan but also since April 2012 in the data centers in Singapore, Malaysia and elsewhere—is being used for such purposes as the lighting in common areas of the buildings.

Click here for details regarding solar power generation.

Installing LED Lights at Data Centers

The NTT Communications Group 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.

Introducing 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.

Steps were taken to put in place the NTT Group Energy Conservation Performance Guidelines Version 3 to coincide with the announcement of the ICT Ecology Guidelines in February 2012.

In fiscal 2011, we purchased approximately 1,350 servers with the highest energy conservation performance (five stars). We will continue to expand the scope of energy-saving equipment that we use and ensure that these guidelines are adopted by each company within the NTT Communications Group.
Preventing Air Pollution and Promoting Energy Conservation through Electric Propulsion Ships

The underwater 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 15% 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. 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.

Implementing the Ship Energy Efficiency Management Plan (SEEMP)

The adoption of SEEMP became a mandatory requirement in July 2011 under the MARPOL international treaty for preventing the marine pollution caused by ships. As a result, it is now a compulsory requirement for ship operators to adopt the most effective operating methods (this includes the reduction of speed, the selection of the most appropriate route taking into consideration ocean currents and weather conditions as well as proper maintenance) in order to curtail the amount of CO2 emissions, and to promote improvements in energy efficiency based on a PDCA cycle. NTT Communications will put in place a plan by January 2013 which will then be implemented throughout all ship operations.

Planting Rooftop Gardens and Green Walls

Planting Rooftop Gardens

Planting Rooftop Gardens. We are using rooftop gardens 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 CO2 and discharging oxygen, as well as improving living environments and beauty views. NTT Communications has expanded this rooftop garden initiative outside Japan to data centers in Singapore and Malaysia. Through this means, the Company is reducing electricity consumption at its buildings.

*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 are 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.

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 16m 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.
### Constructing New Data Centers

#### The Newest Green Data Centers

To support customer businesses that are being seamlessly and speedily developed on a global basis, NTT Communications provides communications networks and integrated data centers from its bases in Japan and overseas. In the Asian region, the Company’s major cloud services infrastructure-the Singapore Seranggon Data Center and Malaysia Cyberjaya 3 Data Center—commenced services in April 2012. Both highly reliable and equipped with state-of-the-art ICT technologies, they represent green data centers in which consideration has also been given to preserving biodiversity.

The Singapore Seranggon Data Center was 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. Moreover, by partially introducing rotary uninterruptible 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. Taking these factors into consideration, the center received the Green Mark Platinum Award for special building under the Building & Construction Authority (BCA) Green Mark Scheme in June 2011. In presenting this award the BCA, a statutory board under the Ministry of National Development, Singapore, has bestowed high marks for the center’s efforts to address environmental concerns through the introduction of high-efficiency air conditioning, incorporation of natural light, use of recycled water and recycled materials, the introduction of LED lighting and, addition of greenery to rooftops and surrounding site areas.

Moreover, at the Lundby Data Center in California and the Sterling Data Center in Virginia, USA, we analyzed and studied the environmental features inside each data center, introduced the SmartDASH system in September 2011 to automatically control the air conditions in accordance with changes in temperature and the environment, and made savings of around 60 million yen in reduced air-conditioning system power consumption. Together with Vigilant Corporation, we were jointly presented with the 2012 Green Enterprise IT Award in the Facility Product Deployment Category by the Uptime Institute, the association that sets the operating standards for data centers, in May 2012.

*Depending on the country and region, SmartDASH is a registered trademark or trademark of Vigilant Corporation.

Click here for details regarding the 2012 Green Enterprise IT Award.

#### Construction of the Tokyo No.5 Data Center

From April 2011, NTT Communications started to offer services from the Tokyo No. 5 Data Center, which is earthquake resilient and equipped with state-of-the-art green features. 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 (PUE) below 1.45, the highest performance for a data center in Japan, and Life Cycle CO2 (LCCO2) is about 15% lower (equivalent to about 6,300 ton-CO2) compared to conventional buildings.

In June 2012, for the second successive year, the data center won the overall grand prize in the data center division at the Sixth ASP-SaaS-Cloud Awards 2012 hosted by the ASP-SaaS-Cloud Consortium (ASPIC).

**Main examples of green ICT technology applications**

- Precast concrete: Thick building materials that control external heat load decrease air-conditioning power consumption.
- Sprinkling water on external air-conditioning units: Collected rainwater sprayed onto external air-conditioning units improves air-conditioning effectiveness.
- High-voltage direct current (HVDC): Minimizing the loss from converting power supply decreases power consumption.
- Green walls on buildings: Control outer wall humidity and prevent heat island effect.
- Solar power generation: Uses renewable energy for internal lighting.
- Air conditioner with latest ICT equipment: Improves energy saving due to latest, highly efficient air conditioner.
- Airflow management: The latest airflow management-by which air from the cooler passes via the floor to the front of the rack, and waste heat from the equipment returns to the air conditioner via slits in the ceiling-prevents heat buildup around the equipment and realizes a significant 35% saving in energy.

*1 PUE (Power Usage Effectiveness): A benchmark indicating energy efficiency of data centers and power 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 calculated as the overall electricity consumption of a data center divided by the electricity consumption of the center’s ICT equipment.

*2 LCCO2 (Life Cycle CO2): Total amount of carbon dioxide (CO2) emitted through the life cycle of a building from construction to operation to demolition.
Office Initiatives

Office Building Initiatives

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 collates 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 2011, and as conditions tightened regarding the supply of electric power, ongoing nationwide electricity-saving requirements became necessary. This in turn accelerated the need for office-related electricity-saving countermeasures. As a result, steps were taken to ensure that computers were set at power-saving modes. Other measures included the alternative use of lighting and the proper adjustment of air conditioning temperature settings.

In office areas, we utilize RenCast; 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.”

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 2006 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 2011 fell to 233 tons from 282 tons in fiscal 2010, a reduction of approximately 17%. We also implemented various measures to improve our transportation efficiency. However, our total transportation increased 16,000 ton-kilometers compared with the previous fiscal year to 649,000 ton-kilometers due mainly to the upsizing in promotional tools.
Company Vehicle Initiatives

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 2011 use of gasoline and diesel by company vehicles was 428,000 liters and 8,000 liters, respectively. Compared with fiscal 2010, this represented an approximate 307,000 liters increase in the use of gasoline owing mainly to an increase in the number of vehicles under management.

Fuel Consumption by Company Vehicles
(Unit: 10,000 liters)

(The scope of tabulation 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 for fiscal 2007.)
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. In addition, this Working Group will collect information on legislative revisions to reporting authorities as well as other topics. 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.

Click here for details regarding the Global Warming Countermeasure Plan/Report.

[Diagram of NTT Communications Energy Management Structure]

[Links to sections: Basic Philosophy and Environmental Management, Preventing Global Warming, Reducing Environmental Impact through Our Services, Promoting and Using Internal Green ICT, Reducing Waste, Preventing Environmental Pollution, Biodiversity Conservation, Reporting to Public and Other Authorities]
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."

![Diagram of Green by ICT](Diagram.png)

![Diagram of Green of ICT](Diagram.png)

Click here to view an enlarged diagram summarizing 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 CO2 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 utilizing this certification system, we at the NTT Communications Group have registered five solutions up to fiscal 2011. Details of which are described on the NTT BizLink website together with quantitative CO2 reduction effects.

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

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Acquiring the eco-ICT Mark

After performing a self-assessment of our CO2 reduction measures, we submitted an application in accordance with the ICT Ecology Guidelines created by the ICT Ecology Guideline Council¹ and acquired the eco-ICT Mark. In February 2010, the council created and published guidelines for appropriate CO2 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. These guidelines have been subsequently revised with a third version publicly announced in February 2012. Through participation in these efforts, NTT Communications is striving to reduce its amount of CO₂ emissions.

Looking ahead, we will involve Group companies in these efforts.

¹ ICT Ecology Guideline Council: The council was established on June 20, 2010 by the following five industry organizations: the Telecommunications Carriers Association, the Telecom Services Association, the Japan Internet Provider’s Association, the Communications and Information Network Association of Japan, and the ASP-Sea Industry Consortium (a designated nonprofit organization).

Joint Trials with Government and Industry

Participating in Smart Industrial Estate Demonstrations Targeting Southeast Asia

Working in collaboration with such companies as Sumitomo Corporation, Mitsubishi Electric Corporation and Fuji Electric Co., Ltd., NTT Communications participated in feasibility studies in a smart community technology demonstration project at an industrial estate on the Indonesian island of Java, a contract business of Japan’s New Energy and Industrial Technology Development Organization (NEDO).

A country showing significant economic growth, the supply and demand of electricity in Indonesia remains tight. The project was implemented as a preliminary study of a technology demonstration project centered on power stabilization systems that will enable the supply of high-quality electricity at industrial parks, where the need is thought to be likely to increase as development and expansion progresses.

NTT Communications was engaged in building considerations for the information and communication technology (ICT) systems platform necessary to provide a stable supply of high-quality power. The ICT systems platform supports power optimization by stabilizing the power supply—by means of power distribution automation and uninterruptible power supply (UPS) systems—and by cooperation between demand-side management and a factory energy management system (FEMS).

Developing Billing Platforms for EV Sharing

The NTT Group developed a car-sharing system using electric vehicles (EVs) from different makers and has been conducting trials to analyze their commercial viability since March 2011. The NTT Group developed a car-sharing system using electric vehicles (EVs) from different makers and has been conducting trials to analyze their commercial viability since March 2011. NTT Communications has participated in these trials by providing functions to bill users for EV usage (billing platform).

EV car-sharing services require operations different from normal car-sharing, such as schedule considerations that take into account vehicle recharging time and the management of recharging amounts. They also require recharging infrastructure. Therefore, these trials aim to analyze the commercial viability of EV car-sharing among NTT Group companies, as well as accumulate know-how relating to the introduction of EVs and peripheral infrastructure.

Raising Awareness and Providing Information via the Web

The NTT Communications Group strives to engender an interest in protecting the global environment and creates opportunities to participate in contribution activities while providing information. This is done by managing the *eco-goo* site that offers information related to the global environment and forms a part of the *goo* portal site run by NTT Resonant and other initiatives including the use of the *goo Green Label* search engine.

eco-goo

Part of the *goo* portal site, *eco-goo* is a site specializing in the global environment that features related columns, news and glossaries. The *eco-goo* site covers such subjects as nature and daily life, food, garbage and recycling, environmental education, companies and the environment, as well as global warming. Naturally aimed at people with an interest in the global environment, thought has been given as to how best to provide information in forms that are not that interested or who have become interested. NTT Communications has provided this site as a place for information dissemination and exchange since 2000. In addition to the traditional themes centered on the global environment, to support reconstruction following the Great East Japan Earthquake in fiscal 2011 we established a site offering ways for people to assist. By taking up the voices of people active in the on-site reconstruction of the disaster-affected areas, we are disseminating information that takes into consideration what each and every one of us can do to help.

In fiscal 2011, we also held the national "Eco-Kids 2011" academic learning contest for children in the third to sixth grade at elementary school, during which they examine global environmental issues, using Internet searches on "goo Green Label" and books, and think about the future of the earth's environment. The event was met with 1,217 submissions from 99 schools nationwide, improving on the previous fiscal year’s event. In this way we will continue to proactively provide platforms where more people can easily support environmental protection activities.
**goo Green Label**

The "goo Green Label" search engine donates part of the profits received from its services to organizations engaged in environmental and social protection activities. All users can participate in this initiative simply by changing over to "goo Green Label," the top design version of the "goo" web portal, and using the search engine in the same way as they did before.

Currently, 60 NTT Group companies and 28 other companies have signed up to the "Corporate Partner Program," which enlists corporations that will promote "goo Green Label" usage internally. As of August 2012, the newly launched "Student Partner Program" had grown to around 26,000 members in 17 high school and university organizations.

Between its inception in August 2007 and the end of March 2011, the site donated a total of 36 million yen to a total of 60 organizations centered on NPOs engaged in environmental protection. In fiscal 2011, we supported the giving of donations and the use of funds for such activities as forest improvement, afforestation and forest thinning toward disaster reconstruction in response to the Great East Japan Earthquake. Combining our efforts with those of the National Land Afforestation Promotion Organization, we donated 7 million yen in two payments, for which we received a certificate of appreciation from the head of the Forestry Agency on December 17, 2011.

Having joined the Forest Creation Cycle forest improvement initiative that is promoted by the same organization, NTT Communications is planning to cooperate in the dissemination of information. For example, we will launch a dedicated website in conjunction with Forest Supporters, a national movement advocating the creation of beautiful forests that promotes this initiative.

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**Green OCN**

Based on the concept of "Environmentally Friendly Web Services" provided via OCN, NTT Communications started its "Green OCN Search Engine" in June 2010 as a service contributing to environmental protection activities. In the same way as "goo Green Label," the plan called for "Green OCN Search Engine" to donate a portion of the revenues earned from sponsor ads shown on OCN search result screens to environmental protection groups tackling environmental problems.

In fiscal 2011, approximately 560,000 yen had been donated to both the Japanese Red Cross and the Wild Bird Society of Japan by September 2011. The total amount donated as of the end of February 2012 was 2,630,000 yen.

"Green OCN Search Engine" became "OCN Green Version" from July 2011. By integrating its operation with "goo Green Label," we will continue to broaden "OCN Green Version" as a new type of Web service enabling users to participate in environmental protection activities.

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* Basic Philosophy and Environmental Management  * Preventing Global Warming
* Reducing Environmental Impact through Our Services  * Promoting and Using Internal ICT
* Preventing Environmental Pollution  * Biodiversity Conservation
* Reporting to Public and Other Authorities
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

Reducing the Amount of Paper Consumption through Tablet Terminals

In fiscal 2011, we undertook such initiatives as maintaining a database of, for example, information and proposals on our tablet computer equipment and services. This enables sales staff to demonstrate and propose our services to customers by means of tablet computers. From the sales aspect, the use of tablet computers enables easily understood, compelling proposals, including the showing to customers of videos showcasing and explaining our services. Having the benefit of not only enabling the creation of effective proposals, but also of dispensing with the need for proposal printouts and pamphlets outlining our services, it can be expected that tablet computers will have the added effect of reducing our use of paper.

In addition to this kind of business efficiency improvement, we are working to take advantage of ICT so that we can further reduce environmental impact.

Promoting Use of the Company’s Internal Cloud

In addition to internal systems for conducting operations in the same manner with other companies, NTT Communications possesses a number of internal systems to provide customers with OCN and VPN services. Since fiscal 2009, we have been migrating and integrating internal ICT infrastructure into a private cloud using a server virtualization with a view to reducing the costs of these internal systems, lessening environmental impact by reducing power consumption, and forming a more robust business continuity plan (BCP).

In fiscal 2011, we migrated 138 internal systems onto the internal ICT infrastructure, a move that reduced the number of servers that accommodate the migrated system by around 40%. Looking ahead, we plan to migrate and integrate our internal ICT infrastructure in Japan with that overseas, while working on efforts to reduce environmental impact on a global basis.

Reducing Employee Transfers through Remote Access and Thin Client Services

The Mobile Connect Service provided by NTT Communications enables simple and secure connection with in-company systems from a PC or smartphone when the user is away and also allows users to remotely check their company e-mail messages and schedules. Combining this with the Biz Desktop Pro thin client service has ensured security from thin client PCs and tablet computers even when away from a company and enabled the reproduction of a company PC environment.

Providing this environment by supplying around 10,000 units primarily to employees in charge of sales who are often away on business is not only a flexibly realizing diverse work styles, for example by taking advantage of the time gaps between appointments by providing an environment that enables duties to be carried out without having to return to an office. With this service, NTT Communications is aiming to put into practice environmentally friendly work styles in which employees’ movements are reduced.

Promoting Cooperation in Efforts to Conserve Electricity Using Thin Client Services

Utilizing its Biz Desktop Pro thin client service that enables access, for example via the Internet, to a cloud-based virtual computer, NTT Communications has promoted systems that have enabled working from home with a view to realizing diverse work styles.

During the power saving campaign of July to September 2011, which was associated with the Great East Japan Earthquake and carried out within the jurisdiction of Tokyo Electric Power Company and Tohoku Electric Power Company, Inc., we contributed to reducing the amount of corporate electricity consumption by expanding the use of this service to around 6,000 employees.

Second Place in the Communications Services Category of the 15th Nikkei Environmental Management Survey

NTT Communications was awarded second place in the nonmanufacturing communications services category of the 15th Nikkei Environmental Management Survey.

Based on responses to a questionnaire, the survey ranks companies on the excellence of their environmental management initiatives. The questionnaire implemented in fiscal 2011 targeted 1,744 manufacturing companies and 2,476 nonmanufacturing companies, and Nikkei Inc. received valid responses from 778 companies. There were four appraisal items in the communications services category of the nonmanufacturing companies: environmental management promotion systems; pollution control measures; biodiversity responses; resource recycling; and measures to curb global warming.

NTT Communications was ranked first for its resource recycling and measures to curb global warming and also received a high appraisal for its environmental management promotion systems. Scoring 381 points out of a possible total of 400, the Company placed second overall. By further encouraging initiatives in the areas of pollution control and biodiversity response, we will promote efforts toward the realization of “Green ICT Vision 2020,” our Medium- to Long-Term Environmental Vision.
Excellence Award at Fifth Eco Printing "Environmental/CSR Report 2011" Grand Prize Contest

At the Fifth Eco Printing "Environmental/CSR Report 2011" Grand Prize Contest administered by the Eco Printing Society, NTT Communications picked up the Excellence Award bestowed on companies that have the highest level of eco printing among those judged. This followed on from an award given to the Company for serving as a model for Japan's eco printing.

The Eco Printing Excellence Award assessed the consideration given to the use of forest-friendly pulp and inks that do not contain any volatile organic substances, recycling as well as measures to curb global warming.

- Basic Philosophy and Environmental Management
- Preventing Global Warming
- Reducing Environmental Impact through Our Services
- Promoting and Using Internal Green ICT
- Reducing Waste
- Preventing Environmental Pollution
- Biodiversity Conservation
- Reporting to Public and Other Authorities
Reducing Waste

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

Waste Reduction and Recycling Initiatives

**Fiscal 2011 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 2011, final disposal of waste from dismantled telecommunications equipment amounted to 104 tons, construction waste 710 tons, and office waste 448 tons. In overall terms, the total volume of final disposal waste increased 138 tons compared with the previous fiscal year to 1,262 tons, while the total volume of waste generated decreased 6,495 tons to 16,040 tons.

**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 2011, the volume of dismantled telecommunications equipment across the Group totaled 1,426 tons. Carrying on from the previous fiscal year, NTT Communications was able to maintain its high recycling rate of 99.9%. The Group-wide recycling rate, on the other hand, was 92.7%. We will continue to further efforts for reuse and recycling, and aim to increase the recycling rate for the entire corporate group.

**Total Volumes and Recycling Rates of Dismantled Telecommunications Equipment**

(Scope of compilation: 14 NTT Communications Group companies for fiscal 2011, NTT Communications on a non-consolidated basis from fiscal 2007.)
Reusing Fiber-Optic Cable

In fiscal 2011, the volume of construction waste generated decreased 5,587 tons compared with the fiscal 2010 level of 9,861 tons. The recycling rate for non-designated materials, such as concrete, fell to 99.4%. The percent change from FY 2010 is -9.0 km.

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 2011, the volume of construction waste generated decreased 5,587 tons compared with the fiscal 2010 level of 9,861 tons. The recycling rate for non-designated materials, such as concrete, fell to 99.4%. The percent change from FY 2010 is -9.0 km. As an NTT Group initiative, a target equivalent with that of designated construction materials has also been set for metal waste, which boasts a high recycling rate, from fiscal 2011. We undertook this review in order to strengthen recycling endeavors.

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.

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 2011, the total volume of office waste generated increased by 293 tons from fiscal 2010 to 3,753 tons. The volume recycled was 2,756 tons, and the recycling rate 73.4%. 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. We began the thermal recycling of plastics from December and of burnable trash in 2010. We will promote thermal recycling and also explore ways of determining the volume of thermally recycled waste. 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 ensuring the security of recycled confidential documents.

Total Office Waste and Recycling Rates

(The scope of reporting 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 2007.)
Adhering Strictly to Proper Industrial Waste Disposal Operations

We rigorously undertake appropriate disposal, management and separation in compliance with the laws on waste materials. In fiscal 2011, we revised the industrial waste disposal operations manual, to which we systematically added industrial waste definitions as well as laws and the workflow. In main buildings we conducted explanatory meetings based on the manual for employees to deepen their understanding of industrial waste disposal.

Vending Machines that Allow Use of a Personal Cup

The NTT Communications Group is promoting an initiative to change cup-type vending machines to eco-specification models that allow purchased beverages to be poured directly into the user's own cup. NTTPG Communications and NTT NavisSpace Corporation are introducing the latter type throughout their companies. NTT Communications is promoting the introduction of eco models in the main building and currently has 35 machines installed. In the normal course of business, this initiative is linked to raising and fostering employees’ environmental awareness of waste reduction. We will develop activities that reduce environmental impact and that at the same time are of the kind that enable employees to derive enjoyment from cooperating and participating.

Effectively Using the Waste from Cafeterias and Dining Facilities

In addition to giving due consideration to the effective utilization of materials in offices, dealing with waste from cafeterias is taking on added importance. NTT Communications has introduced a raw garbage disposal machine to deal with the waste generated by its employee cafeteria. A system to recycle the waste into organic compost is in operation, with NTT East-Gunma acting as subcontractor. In fiscal 2011, we processed 19 tons of kitchen waste. As a result, this was recycled and generated 1.9 tons of compost, which was put to use by farmers in the Kanto region and others. This initiative is not merely an effective utilization of resources, as it is also important to note the CO2 reduction effect from disposing of less waste by incineration. In continuing to promote this initiative we are strengthening environmental considerations in our day-to-day operations and at the same time improving employee awareness.

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 2011, we continued to reduce paper usage through the use of IC card multi-function printers and printing log data. 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. This helps to further raise awareness. In addition, we have been able to confirm individual monthly usage as well as usage conditions through the daily use of multi-function printers by employees from fiscal 2011. We also continue to encourage digitization of paper documents and the use of projectors in conference rooms. In fiscal 2011, paper consumed per full-time employee (converted to A4-size office paper) was 3,287 sheets. During fiscal 2012, we will pursue further reduction in paper usage through the application of the latest ICT technology.
Providing an Online CSR Report

Over the years, NTT Communications Group has been actively engaged in environmentally friendly publications. Specifically, we have been able to promote a multifaceted approach involving, for example, the selection of environmentally friendly paper and inks as well as thorough printing processes with low environmental impact. These aspects having undergone evaluation, the Group’s CSR Report 2011 picked up the Excellence Award at the Fifth Eco Printing Grand Prize Contest hosted by the Eco Printing Society.

For CSR Report 2012 we have taken our efforts one step further and produced the report in e-book format to bring to fruition a paperless report.

As e-books become more widespread in a variety of formats, progress is being made with efforts to make CSR reports paperless at companies in Japan and overseas. As a form of report from a company that sees itself as a global ICT company, the NTT Communications Group would also like to develop the active use of CSR reports in e-book format.
Preventing 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 the formulation of guidelines covering the introduction of low-emission vehicles, improvements to facilities and methods of operation, bolstering of management, and education and training.

With regard to chemical substance management systems, in which there has been growing interest within society, the Company has implemented proper management in maintenance departments over the course of its history-based, for example, on the Waste Disposal and Public Cleansing Act, the Law Concerning Special Measures Against PCB Waste and the Electricity Business Act—excluding assigning vice presidents as managers. While conducting storage inspections on a regular basis, we are thoroughly overhauling the system to implement rapid checks in the event of an earthquake or disaster.

During training sessions on environmental laws, we always keep abreast of the content of law revisions, share information between each Environmental Working Group and plan optimization of our operations in a timely manner.

Complying with Environmental Legislation

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 2011. We plan to continue our companywide efforts to prevent environmental pollution and comply with related laws and regulations.

*1 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 Environmental Hazardous Substances

Air Pollution Countermeasures

Our business activities emit NOx and SOx, which cause air pollution. Approximately three-fourths of the NOx emissions are attributable to the use of gasoline and diesel in our operational vehicles, with the remaining one-fourth emitted during generation of the electricity we use.

Most SOx (around 92%) is emitted during generation of the electricity we use. In fiscal 2011, we decreased our NOx emissions from the fiscal 2010 level by 3 tons to 504 tons, while increasing SOx emissions compared with the fiscal 2010 level by 6 tons to 75 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.
Putting in Place an Eco Car Introduction Policy

Companies can contribute to solving pollution problems and the realization of a low-carbon society by thoroughly taking the environment into account with regard to the vehicles they use for their businesses. As part of our efforts to protect the environment, we formulated guidelines covering the introduction of eco-friendly vehicles. Based on these guidelines we are accelerating our efforts throughout the Group.

**NTT Communications Group**

**Low Emission Vehicle Introduction Policy**

1. **Objective**
   - Introduce low emission vehicles for internal use as a part of efforts to reduce environmental impact

2. **Scope**
   - All vehicles owned and operated by NTT Communications and its Group companies.
   - However, this shall not apply for special-purpose vehicles (power supply and broadcasting vehicles) when low emissions vehicles are not available.

3. **Introduction Standards**
   - In principle, the introduction of vehicles shall be limited to low emissions vehicles.
   - Commercial vehicle that offer the lowest possible emissions shall be selected when the introduction of low emission vehicles is problematic
   - (Vehicles that meet 2010 fuel efficiency standards)

4. **Targets**
   - All (100%) of the Group’s fleet to comprise low emission vehicles* by 2015
   - Low emission vehicle: 0% or more of the 2010 fuel efficiency standard

5. **Future Initiatives**
   - Hold eco-drive training sessions
   - Promote “drive doctor” installation
   - Recommend introduction to ensure optimal vehicle operating management, driving safety, the prevention of accidents and contributions to environmental protection
Ozone-Depleting Substance Countermeasures

We dispose of ozone-depleting substances in an appropriate manner. The volume of specified halons used in our fire extinguishing equipment in fiscal 2011 was approximately 143 tons, roughly the same as in fiscal 2010. Meanwhile, the volume of specified halons (the amount of fluorocarbons (CFCs)) used in our air-conditioning equipment in fiscal 2011 was around 1 ton, essentially unchanged from fiscal 2010.

Volume of Specified Halons Used in Fire-Extinguishing Equipment

(Unit: metric tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Halons Used (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>143</td>
</tr>
<tr>
<td>FY 2008</td>
<td>143</td>
</tr>
<tr>
<td>FY 2009</td>
<td>143</td>
</tr>
<tr>
<td>FY 2010</td>
<td>143</td>
</tr>
<tr>
<td>FY 2011</td>
<td>143</td>
</tr>
</tbody>
</table>

(The scope of compilation: 14 NTT Communications Group companies from fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007.)

Volume of Specified CFCs Used in Air-Conditioning Systems

(Unit: metric tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>CFCs Used (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>42.7</td>
</tr>
<tr>
<td>FY 2008</td>
<td>57.8</td>
</tr>
<tr>
<td>FY 2009</td>
<td>34.1</td>
</tr>
<tr>
<td>FY 2010</td>
<td>26.0</td>
</tr>
<tr>
<td>FY 2011</td>
<td>23.8</td>
</tr>
</tbody>
</table>

(The scope of compilation: 14 NTT Communications Group companies from fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007.)

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 2011, no asbestos emissions were detected. There are no plans to demolish buildings in fiscal 2012. 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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>11</td>
</tr>
<tr>
<td>FY 2008</td>
<td>81.0</td>
</tr>
<tr>
<td>FY 2009</td>
<td>391.0</td>
</tr>
<tr>
<td>FY 2010</td>
<td>0.0</td>
</tr>
<tr>
<td>FY 2011</td>
<td>0.0</td>
</tr>
</tbody>
</table>

(The scope of compilation: 14 NTT Communications Group companies from fiscal 2010, 13 Group companies in fiscal 2009, 11 Group companies in fiscal 2008, 12 Group companies in fiscal 2007.)
Storage and Management 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 3,859 systems containing PCBs in fiscal 2011, around the same level as 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.
### Strengthening Storage and Management in the Anticipation of Emergency Situations

Against a backdrop of natural disasters that are occurring frequently on a global scale, there has in recent years been a growing interest within society in the management systems needed for environmental pollutants in times of emergency. Owning and operating IT infrastructure throughout the world, we have been thorough in putting into place storage and management systems with "events" in mind for some time. In the management of pollutants and PCBs in particular, we have implemented measures that take heed of such factors as earthquakes, fires, flood controls, lightning protection, puncture resistance, ventilation and security. By carrying out periodic inspections, we are constantly confirming that such substances are properly managed. With regard to such events as major earthquakes and disasters, we have built a rapid verification system designed not only to prevent damage when a disaster first strikes but also from the perspective of preventing secondary disasters. We exercise great care in conducting uninterrupted operations in safety and security.

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- Basic Philosophy and Environmental Management
- Preventing Global Warming
- Reducing Environmental Impact through Our Services
- Promoting and Using Internet Green ICT
- Reducing Waste
- Preventing Environmental Pollution
- Biodiversity Conservation
- Reporting to Public and Other Authorities
Biodiversity Conservation

Together with Preventing Global Warming, 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.

As a member of the NTT Group, NTT Communications has put in place a set of action guidelines concerning biodiversity conservation in order to promote activities that take into consideration biodiversity conservation concerns. While making every 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.

Putting in Place Policies

Biodiversity Conservation Action Guidelines

As members of the NTT Group, we are formulating Biodiversity Conservation Action Guidelines and implementing approaches through business and social contribution activities to promote initiatives that take biodiversity conservation into account. Specifically, for some time we have promoted three environmental contributions through ICT-Green of ICT, Green by ICT and Green with Team NTT and are developing approaches that contribute to biodiversity in each.

There is a growing awareness of global-scale biodiversity conservation issues. In addition to inspection efforts, identifying issues and promoting improvement efforts, we will disclose the status and achievements of those activities across the Group as a whole by such means as our CSR reports.

NTT Communications Group Action Guidelines with Regard to Preservation of Biodiversity

1. Basic Policy: In compliance with the NTT Group biodiversity “approach concept,” established by the NTT Group
   - Development Centered on Business Activities
     The Group recognizes that all activity is intricately linked to the planet and to biodiversity, understands the scope and impact at home and overseas that are related depending on the nature of a business, and promotes initiatives that are recognized as having a preservation effect.
   - Development Centered on Contribution to Society
     In partnership with its stakeholders, the Group widely promotes initiatives toward the preservation of biodiversity, regardless of their relevance to its business.

2. Action Guidelines
   - Implement actions that take into account the preservation of biodiversity in business activities (Green of ICT)
   - Contribute to preservation of social biodiversity in business activities (Green by ICT)
   - Deepen understanding of biodiversity, promote nature conservation activities together with employees, their families and the planet (Green with Team NTT)

NTT Communications Group Initiatives Related to Preservation of Biodiversity

<table>
<thead>
<tr>
<th>Initiative Items</th>
<th>Outlines of Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>We implement actions that take into account the preservation of biodiversity in business activities (Green of ICT)</td>
<td>At the time of wireless relay station construction conducting a habitat survey of area's plants, birds and insects, implementing a construction plan that does not destroy ecosystems. Removal carried out in same way</td>
</tr>
<tr>
<td></td>
<td>Decreasing electric power consumption by making air-conditioning more efficient and improving lighting in communications and office buildings as well as by PC energy-saving measures</td>
</tr>
<tr>
<td></td>
<td>Reducing the impact on ecosystems from product procurement by procuring seabed mining devices and green purchasing</td>
</tr>
<tr>
<td></td>
<td>With the prevention of marine pollution as a basic policy, laying submarine cables that protect coral reefs and cleaning the ocean floor before and after laying cable</td>
</tr>
<tr>
<td></td>
<td>Rainwater, recycled water used at the Singapore Serangoon Data Center for the air-cooled chillers and for watering plants. Less electricity consumed for lighting due to use of natural lighting</td>
</tr>
</tbody>
</table>
We contribute to preservation of social biodiversity in business activities (Green by ICT)
Including biodiversity special features and disseminating information on the environment from home and overseas in "eco-guide"
Remote monitoring by camera of rice growth status

We deepen understanding of biodiversity and promote nature conservation activities together with employees, their families and the planet (Green with ICT)
Elimination of disposable chopsticks in canteens
River water purification by (clogging) effective microorganism (EM) mud balls into rivers
Chichibana tree seedling field regeneration program
Encouragement of personal cup use at vending machines
Forest environment conservation and tree planting through Tokyo Greenship Action

Considerations during Data Center Construction

Recycling Water
As a global ICT company, we promote biodiversity considerations at our data centers. Our newest data centers incorporate cutting-edge innovations with regard to the effective use of water resources, an area in which there has been growing global interest in recent years.
The multifaceted approach adopted for the Singapore Serangoon Data Center that commenced operations in 2012 included the following innovations:

Use of rainwater
- Rainwater is used for watering on-site plants. From the health and safety aspect, care is taken to set up rainwater collection in such a way that oil does not become mixed with the rainwater.

Use of reclaimed and recycled water
- Desalinated seawater and water recycled from water that has been used once before are used for such purposes as air cooling.
- The automatic sprinklers for the rooftop gardens on the building and car park roofs usually operate with recycled water only.
- The green wall equipment on the ground floor usually operates with recycled water only.
- Greening facilities such as outdoor ponds make extensive use of rainwater.

Maintaining Vegetation
From the perspective of building facilities in harmony with the environment, plant life considerations are taking on added importance in facility design. For the Serangoon Data Center attempts were made to take advantage of local vegetation through the efforts set out below.

Consideration in planting indigenous species
- In green areas, making a point to incorporate a variety of trees that are found locally
- Taking advantage of plants that symbolize the Indonesian-Malaysian region, such as by using Johannessteijmanni palm species in the underbrush. In association with trees, these act as a device that helps evoke the local forest.

Transplantation of roadside trees
- In Singapore, all roadside trees are registered with and managed by the National Environment Agency (NEA).
- When the need arises to cut down trees during the course of facility construction, roadside trees are transplanted within the data center in cooperation with the NEA, and plans made for their effective use.
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 MAREPOL 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 to lay cables.

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.

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.

Adoption of coating method to suppress adhesion of marine organisms and use of eco-friendly paints

When marine organisms attach themselves to a ship’s hull, this leads not only to higher fuel consumption and therefore increased CO2 emissions but also has an effect on ecosystems by carrying the organisms to other ocean areas. To prevent this, during maintenance of a ship’s paintwork extensive use is made of sandblast painting, the blowing of air under high pressure and polish surfaces before painting.

Although wide use is made of ship paints that in the past contained tin, much more has become known about tin’s effects on ecosystems in recent years. In response, we are thorough in our use of tin-free paints in compliance with the AFS Convention (the International Convention on the Control of Harmful Anti-fouling Systems on Ships) that came into effect in 2008.

Considerations during Wireless Station Construction and Dismantling

Caring for Nature Reserves

As of March 31, 2011, 10 of our 129 wireless stations for telecommunications and broadcasting networks were in national parks. The NTT Communications Group carefully considers biodiversity requirements in building micro-roads recognizing that we need to patrol and maintain these facilities, while adhering strictly to the law and our own environmental assessment methods. In undertaking assessments, we establish specific areas of concern and align construction processes accordingly.

We adopt a multifaceted approach toward avoiding and minimizing any impact on the ecosystem. In addition, we strive to restore the environment to its original state prior to construction in the dismantling of wireless stations. We discuss with local residents and use local soil in our restoration activities rather than bringing in soil from other regions.
Operations based on 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 the 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 (JIBIB) 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. Through these means, every effort is also being made to implement awareness activities with respect to biodiversity conservation.
Reporting to Public and Other Authorities

Fiscal 2011 Global Warming Countermeasure Plan/Report

The Law Concerning the Rational Use of Energy
- NTT Communications Register Reports [PDF: 1,066KB]
- NTT Communications Medium- to Long-term Reports [PDF: 150KB]

Tokyo Metropolis
- NTT Communications Site 0924 [PDF: 300KB]
- NTT Communications Site 0925 [PDF: 269KB]
- NTT Communications Site 0926 [PDF: 549KB]
- NTT Communications Site 0927 [PDF: 540KB]
- NTT Communications Site 0928 [PDF: 540KB]
- NTT Communications Site 1027 [PDF: 381KB]
- NTT Communications Site 0554 [PDF: 505KB]

Kanagawa Prefecture
- NTT Communications Kanagawa Building [PDF: 237KB]

Yokohama City
- NTT Communications Yokohama [PDF: 882KB]

Saitama Prefecture
- NTT Communications Saitama Building [PDF: 952KB]

Nagoya City
- 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: 878KB]
Hyogo Prefecture
- NTT Communications Hyogo Building [PDF: 647KB]

Okayama Prefecture
- NTT Communications Okayama Building [PDF: 190KB]

Hiroshima Prefecture
- NTT Communications Hiroshima Building [PDF: 249KB]

Miyazaki Prefecture
- NTT Communications Miyazaki Building [PDF: 90KB]

Kagoshima Prefecture
- NTT Communications Kagoshima Building [PDF: 164KB]

- Basic Philosophy and Environmental Management
- Preventing Global Warming
- Reducing Environmental Impact through Our Services
- Promoting and Using Internal Green ICT
- Reducing Waste
- Preventing Environmental Pollution
- Biodiversity Conservation
- Reporting to Public and Other Authorities
Special Feature on Human Resources

Respecting Our Employees
Building Bridges based on Our Global Capabilities

Fostering human resources who consistently challenge the world;
Promoting cross-border, global human resource management.

KEY FIGURE
Number of first-year or second-year employees dispatched overseas
Number of overseas subsidiary employees undertaking training in Japan

50 24

KEY ENGAGEMENT
- Regular exchange of opinions between management and employees
- Global human resources exchange program
- Initiatives aimed at harnessing diverse human resources

JAPAN

Promoting Programs that Entail the Dispatch of Personnel Overseas and the Training of Overseas Staff in Japan as a means of Mutually Enhancing Diverse Perspectives and Values

From Japan to Overseas and from Overseas to Japan

In an effort to quickly develop employees capable of working successfully overseas, NTT Communications has introduced the "Global Challenging Program for first-year and second-year employees.

Based on the human resources development policy that opportunities for growth are grounded in firsthand experience on the front lines, we expanded this program to include first-year and second-year employees from fiscal 2011. This program allows 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, approximately 50 employees were stationed overseas, with plans to increase this number going forward.

Moreover, NTT Communications invites employees of overseas subsidiaries to work in Japan through six-month and two-year training programs. As of February 28, 2012, a total of 24 employees from 12 subsidiaries in the U.S., Europe, and Asia are working in Japan. As globalization in the business world accelerates, this interaction between employees from each country and the carrying out together of duties helps foster a deeper understanding of diversity that goes beyond language and culture.

Accelerating the Hiring of Employees Who Have an Immediate Impact

NTT Communications is working to secure human resources with the necessary practical experience to address the rapid globalization of its corporate customers' businesses. In addition to hiring foreign students in Japan, we are bolstering efforts to locally recruit foreign students overseas. With a focus on Asia, we have set the target of the ratio of foreign national hires to total hires to 10% or more.

Looking ahead, we will promote interaction between human resources who boast wide-ranging global perspectives. Our goal is to entrench a uniform culture toward diversity across the entire Group.
JAPAN

Sharing Values and Building Close-knit Ties of Mutual Trust Helps Nurture Global Teamwork

After gaining experience in overall financial operations at NTT Europe Ltd. over a period of one year from April 2011, I am now working in the Global Business Promotion Division in Japan responsible for overseas subsidiary business planning and financial analysis. During my period of training I had the pleasure of working not only with colleagues from the U.K., but also from many cultures and countries throughout Europe including the Netherlands and Spain. Through this experience, I learned the importance of the 3S principle, Simple, Speedy, and Smile, when endeavoring to earn the trust of people from diverse cultures. This 3S Principle continues to prove useful when dealing with my counterparts responsible for finance in each Group subsidiary around the world.

Keisuke Takahashi
Manager responsible for planning
Planning Department
Global Business Promotion Division

GLOBAL

We Share the Future as One Team

Ensuring effective operations in a global environment that is characterized by its mix of diverse thoughts, ideas, and cultures is regarded as an extremely difficult task posing a multitude of challenges. When commercializing a global product or engaging in business with global customers and partners, however, it is essential to take this issue into consideration when pushing forward each project. I was fortunate to participate in the Group’s transfer program in Japan learning along the way various methods in resolving conflicts of interest between organizations and gaining an insight into wide-ranging global perspectives. I consider this a valuable asset and extremely helpful in carrying out my duties.

John Nassar
NTT America
Finance Department
Director

Composition of the NTT Communications Group’s Workforce

In a few short years, the number of the Group’s overseas employees has increased from around 2,000 to over 5,000 today. Going forward, the Group will continue to embrace different nationalities and values, and create opportunities for all employees to succeed at work.

Click here for an enlarged diagram showing Composition of the NTT Communications Group’s Workforce.
CSR Report 2012

Respecting Our Employees  Detailed Report

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
  - Training Systems
  - Developing Professional Human Resources
  - Internal Job Posting System
  - Personnel Evaluation

- A Workplace for Everyone
  - Diversity Office Initiatives
  - Global Human Resource Management (GHRM) Initiatives
  - Recruiting Global Human Resources
  - Ensuring that Diversity is Well Accepted and Enshrined throughout the Group
  - Providing Career Development Support for Diverse Human Resources
  - Promoting Work-Style Reform
  - Retaining Employees Who Reach Retirement Age
  - Incorporating Employee Feedback
  - Dream Idea Contest

- Maintaining and Improving Employee Health
  - Work-Life Committee
  - Occupational Safety and Mental Healthcare
  - Colleagues' Plan
  - Supporting Volunteer Activities
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 Personnel 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 2016, 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 in particular helps strengthen specialist expertise, as we endeavor to realize our Vision 2015.

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-site 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.

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.

Click here for an enlarged view of our diagram of training systems.
Developing Professional Human Resources

In general terms, operating environments are experiencing significant change due to such wide-ranging factors as the growing diversity, sophistication, and complexity of customer needs, as well as the increased pace of transition to new business and consumption models and globalization. At the same time, we are witnessing a hollowing out of skills and the fragmentation of organizations. These factors are collectively contributing to a decline in on-site capabilities. Against this backdrop, NTT Communications recognizes the critical need to improve its human resource development activities and to foster the personnel who will underpin the Company's second foundation. To this end, we are introducing measures that are aimed at nurturing on-site professionals who are capable of excelling on any stage.

Based on our concept of professional human resources, we have classified personnel into seven categories. Within each category, we have identified the necessary practical knowledge and skills, underpinned by the appropriate experience, for human resources to prevail, as well as the on-site capabilities and human skills required of all personnel. With this as a starting point, we are establishing essential skill criteria on an individual human resource category basis taking into consideration both in-house and external perspectives.

Definition of Professional Human Resources (Conceptual Image)

1. Human resources who possess frontline skills
Frontline professionals with practical technological and other skills who draw on a wealth of personal pride and experience in supporting customers.

2. Human resources who can produce results through teamwork
Professionals in their own right who can take proactive role in decision-making and action within a team environment and can maximize added-value through team play.

3. Human resources who can excel in all environments
Human resources who can excel not only within the NTT Communications Group, but also in all environments.

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 2011.
- Human resources who are capable of bolster Group companies toward maximization of total Group power
- Human resources aimed at bolstering global business
- Human resources aimed at bolstering cloud-related services
- Human resources aimed at bolstering upper-layer-type services

We will continue to actively use this system to help employees advance their careers and to revitalize the organization. At the same time, we plan to promote job postings in domains that exhibit growing strength with the aim of attaining our business vision.

Employee transfers

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<tbody>
<tr>
<td></td>
<td>Number of applications</td>
<td>Number of transfers</td>
<td>Number of applications</td>
<td>Number of transfers</td>
</tr>
<tr>
<td>Within NTT Coms Group</td>
<td>40</td>
<td>19</td>
<td>9</td>
<td>3</td>
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<tr>
<td></td>
<td>40</td>
<td>20</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>To other NTT Group companies</td>
<td>153</td>
<td>69</td>
<td>152</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>158</td>
<td>48</td>
<td>153</td>
<td>35</td>
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(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 October 2011, we took steps to review our evaluation system in order to further enhance its validity and effectiveness. To this end, we place greater emphasis on employees who act with an increased sense of speed, and are prepared to boldly address new challenges and pursue innovation, without the fear of failure, while positioning the needs of customers as their first priority.
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.

Promoting Diversity

Diversity Office Initiatives

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 2011, we placed considerable priority on advancing "work-style reform." This was in addition to our existing activities. In specific terms, we established a system for working from home while putting in place an ICT environment incorporating mobile terminals. These efforts are designed to realize work-styles that help increase the efficiency and autonomy of work as well as productivity regardless of time and place. With this aim of enhancing productivity, we hope to introduce ways of better balancing the work and home lives of employees. Accordingly, we will continue to implement this project with the aim of fostering a corporate culture that places the utmost emphasis on employee health and the opportunity to further improve skills and capabilities.

Global Human Resource Management (GHRM) Initiatives

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 "Global One Team" as our key message to promote global activity by human resources.

In the management training program started from fiscal 2009, 17 locally hired overseas employees were seconded to the head office and are involved in business in Japan. In fiscal 2011, reciprocal human resource exchanges (training programs, etc.) were expanded between NTT Communications and overseas subsidiaries. Carrying on from the previous fiscal year, we continued to hold global communications training, pre-assignment training, and joint management training for NTT Communications and overseas subsidiaries. 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 GHRM 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.

Number of Total Employees and New Employees by Gender

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<tr>
<th></th>
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<tbody>
<tr>
<td>Number of employees</td>
<td>8,390</td>
<td>8,350</td>
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<tr>
<td>Male</td>
<td>7,456</td>
<td>7,410</td>
<td>7,200</td>
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<tr>
<td>Female</td>
<td>935</td>
<td>940</td>
<td>960</td>
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</table>

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<th></th>
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<td>New employees</td>
<td>201</td>
<td>159</td>
<td>215</td>
<td>226</td>
</tr>
<tr>
<td>Male</td>
<td>146</td>
<td>144</td>
<td>167</td>
<td>169</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>52</td>
<td>58</td>
<td>56</td>
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(Scope: NTT Communications (non-consolidated), excluding seconded employees)

Number of Overseas Employees

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<th></th>
<th>Fiscal 2011</th>
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<tbody>
<tr>
<td>Number of overseas employees</td>
<td>6,600</td>
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(Scope: NTT Communications (non-consolidated), excluding seconded employees)
Recruiting Global Human Resources

Taking into consideration rapid and dynamic changes in its operating environment, the NTT Communications Group established Vision 2015, a medium-term policy that emphasizes the need to further increase the pace of business development. From the perspective of its human resources, the Group is strengthening its personnel platform in an effort to achieve this vision. This entails actively recruiting a wide variety of employees who are capable of bolstering competitiveness while taking the lead in the Group’s globalization endeavors. In particular, we are aggressively hiring personnel, who adopt a hands-on approach toward our worldwide expansion activities, focusing especially on students from a broad range of countries.

Given the strong global nature of our recruiting activities, we are stepping up efforts at overseas subsidiaries. Considerable weight is being placed on uncovering and hiring the highest caliber personnel in human resource markets outside Japan focusing on Asia, which continues to enjoy growth. In this manner, we are successfully welcoming outstanding personnel to the Group including engineers. In addition to hiring overseas students and Japanese nationals who have graduated from universities outside Japan, we are currently conducting “job fairs” throughout the world as well as recruiting activities on the campuses of overseas universities.

Entering fiscal 2012, we intend to boost local hiring in Korea, China, the U.S., and India, with plans in place to expand into other countries and regions.

Through these initiatives, we are seeking to increase the percentage of staff from countries other than Japan to 10% or more.

New Graduate Recruiting Number of New Graduate Recruits (As of April 1, 2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>195</td>
<td>68</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign nationals (non-Japanese)</td>
<td>6</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>2010</td>
<td>186</td>
<td>58</td>
<td>244</td>
<td>2.33%</td>
</tr>
<tr>
<td></td>
<td>Foreign nationals (non-Japanese)</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Ensuring that Diversity is Well Accepted and Enrenched throughout the Group

NTT Communications is convinced that a common awareness among all employees is the first step toward realizing a workplace in which personnel maintain a mutual respect for one another. Based on this awareness, the Diversity Office took the lead in implementing the following measures throughout fiscal 2011.

1. Streamlining training for all employees

In order to ensure that personnel fully understand that importance and necessity of diversity, we implemented streaming training for all employees during the third quarter of fiscal 2011. With an implementation rate of 99%, this initiative played a useful role in fostering a culture of diversity throughout the workplace.

2. Distributing information through the intranet

NTT Communications set up and has continued to operate a designated Diversity Office site with the specific aim of educating employees since August 2008. In fiscal 2011, particular weight was placed on such themes as “female employee career development,” “globalization,” and “male employees who actively take care of their children.” Based on each theme, the site introduced the experiences of around 30 employees while providing information on the measure implemented by the Diversity Office as well as columns on workplace communication.

3. Implementing Awareness Surveys Encompassing All Employees

NTT Communications has in the past continued to implement Work Hours as well as Employee Satisfaction surveys. In fiscal 2011, the two surveys were integrated with steps taken to include an “Employee Awareness” category. The implementation rate in this first year was around 76%.

The results of this survey will be used to create workplace environments that help motivate employees.

4. Promoting "Family Day"

As a first for fiscal 2011, we introduced the concept of “Family Day.” In order to gain a better understanding of the Company’s activities, employee families were invited to experience the Company’s latest ICT technologies and to tour “Toudou,” NTT Communications’ communication cable designated pipe line tunnel.
Providing Career Development Support for Diverse Human Resources

NTT Communications strives to provide opportunities that allow diverse human resources to engage in work in a lively and vibrant manner. At the same time, we place considerable emphasis on career development support in accordance with the needs and circumstances of each era. In fiscal 2011, energies were channelized toward helping our female employees develop their careers. In particular, we reached out to women raising young children as well as employees trying to balance the demands of work and caring for a family member at home.

As one measure designed to help women develop their careers, we conducted hearings with female managers in fiscal 2011. This initiative is aimed at promoting the healthy exchange of opinions on how women can better make use of their vitality and capabilities. Complementing this and other endeavors, female employee career development training was implemented on a combined basis with the NTT Group. In this manner, concrete steps were taken to uncover the next generation of female employees who would lead the Group forward.

Carrying forward efforts from the previous fiscal year, we continued to implement various measures to help employees caring for young children. In addition to notifying employees currently on childcare leave of the Company’s wide-ranging systems through such media as the Company’s NTT-LIFE+ online child and nursing care support site, we asked employees who had used these systems to share their experiences. At the same time, we initiated workplace return preparation seminars for employees taking childcare leave, work return support seminars for employees returning to work after completing child care leave, and career education training for employees using the Company’s shortened workweek system in order to take care of their children. Collectively, around 180 employees participated in each initiative. Moreover, we conducted roundtable discussions with prominent external figures and male staffing actively involved in the raising of their children to help ensure a better work-life balance. The details of these tasks were posted on the Company’s internal site.

In order to reach out to employees caring for family members at home, we carried forward measure from the previous fiscal year. Accordingly, steps were taken to invite outside lecturers to provide helpful advice through a series of lectures. Approximately 70 staff attended these lectures. While the number of employees currently involved in nursing care is small, this initiative is a forward-looking measure as Japan enters an era of nursing care. In fiscal 2011, employee family members also participated in certain events. The goal was to create opportunities where family members could think carefully about future nursing care needs.

Promoting Work-Style Reform

NTT Communications is promoting a variety of measures that are expected to contribute to work-style reform. These efforts are in turn aimed at balancing corporate growth with diverse work-styles. Among a host of endeavors, the Company is promoting a system that allows employees to work from home and other measures designed to increase productivity. In fiscal 2011, we extended the scope of eligibility for our work-from-home system to help employees with their child and nursing care commitments. In addition to lifting the age of children, the system was made available to managerial staff. As a result, the number of system users expanded to 172. Through these and other measures, NTT Communications is successfully promoting more flexible work-styles across a wide and diverse range of employees.

Over and above the work-from-home system, we are accelerating the implementation of work-style-related measures that are unique to an ICT company. In fiscal 2011, we focused on creating an environment that would allow employees to work from remote locations when, for example, visiting clients outside the office or on a business trip. The use of thin client terminals was therefore introduced to allow staff to effectively use any spare time. Thanks to this initiative, the number of potential remote work employees has increased to around 5,000 representing a significant step in our effort to promote work-style reform. Complementing the use of tablet terminals, we are advancing the concept of paperless meetings. In this manner, we are taking into consideration the environment as a part of efforts to enhance operating efficiency. Great awareness by each and every employee is essential to enhancing operating efficiency through the use of ICT. In fiscal 2011, we invited key figures as a part of our work-style reform promotion program to speak with the Company’s executive. These discussions were transmitted using our in-house intranet site. We also asked prominent figures from outside the Company to conduct several lectures. An aggregate total of approximately 800 employees attended these events.

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 Retired Employees

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</thead>
<tbody>
<tr>
<td>36</td>
<td>58</td>
<td>60</td>
<td>91</td>
</tr>
</tbody>
</table>

(Scope: NTT Communications (non-consolidated))
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) in July 2008. 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 673 proposals through July 04 2012. 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.

Dream Idea Contest

As an initiative aimed at expanding the horizons and opening up the future of the NTT Communications Group, we are calling on the submission of new ideas from a wide range of areas and implementing measures that contribute to the development of services. This initiative was dubbed "the Dream Idea Contest," which encapsulates our desire to see a more vibrant NTT Communications Group.

This contest allows anyone working within the NTT Communications Group to submit an idea. After the first call, we received around 600 submissions with the second call attracting approximately 210 replies. Applications were posted on a designated SNS site to allow for easy access and browsing while promoting the exchange of opinions. A system was put in place that allows even the uninitiated in SNS sites to amend and brush up their ideas as they please.

Ideas that are picked as new services are recognized through an award from the president which is helping to further motivate applicants and the submission of ideas.

As we work to become a company that is filled with dreams, we will continue to implement measures that help create a vibrant and comfortable workplace.
Maintaining and Improving Employee Health

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

Work-Life Balance

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.

In fiscal 2011, the committee oversaw steps to further upgrade and expand education activities in order to ensure a greater focus toward efforts aimed at increasing operating efficiency. In addition to the regular distribution of electronic newsletters to all employees, prominent figures from outside the Company were invited to conduct lectures and seminars. Among a host of initiatives, the committee also initiated e-learning training, all in an effort to ensure the proper control of 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 2011, 182 employees were certified as mental health keepers, bringing the total number to 1,658. Nearly all section heads have completed the training. Approximately 500 employees with high-risk mental health 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)

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<tr>
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<tbody>
<tr>
<td>1 (working 0 / commuting 1)</td>
<td>3 (working 1 / commuting 5)</td>
<td>5 (working 0 / commuting 1)</td>
<td>10 (working 4 / commuting 12)</td>
</tr>
</tbody>
</table>

(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 2011, we offered 45 "menus" items, including the addition of a pension asset-building subsidy. Moreover, a total of 194 employees attended life design seminars, and 236 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. In fiscal 2011, a total of 199 employees made use of this system to participate in social contribution activities across a wide range of areas. This was a substantial increase compared with the previous fiscal year and reflected the sharp upswing in volunteer activities following the earthquake disaster.

Number of Employees Using Our Volunteer Leave System

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</thead>
<tbody>
<tr>
<td>74</td>
<td>65</td>
<td>84</td>
<td>100</td>
</tr>
</tbody>
</table>

(Scope: NTT Communications (non-consolidated))
Expanding into New Horizons

Exploring New Challenges

Expanding into New Horizons

We place the utmost importance on the ability to take action that leads to the creation of new value for society. Here, we provide examples from our day-to-day activities where we endeavor to take up new challenges as we contribute to society.

Fulfilling the Aspiration of Children; Taking Up the Challenge of Promoting a BOP Business

Contributing to the BOP Demographic while Creating New Value

Developing countries throughout the world are said to comprise a "bottom of the pyramid (BOP)" demographic of low-income earners. It has also been reported that people earning less than US$3,000 annually total around four billion, accounting for approximately 70% of the world’s total population. Under these circumstances, the challenge of creating social value in cooperation with the BOP demographic is attracting increased interest from the global corporate sector. Put simply, companies are paying more and more attention to measures that help resolve social issues in BOP areas while enhancing living environments as a means of creating new markets for the future.

The Children of Indonesia Continue to Face a Harsh Reality

The percentage of children in Indonesia, who receive an education that we ourselves would hope to receive, is said to be no more than 3 to 5%. In other words, the vast majority of children are unable to receive an adequate education due to poverty or geographical constraints irrespective of their motivation and abilities. Given these circumstances, NTT Communications has received calls for the provision of effective education services using ICT in the hope of resolving this serious issue.

Utilizing Our Unique Capabilities to Overcome Hurdles One at a Time

Initially, NTT Communications partnered with institutions in Japan to build an ICT-based education environment. Steps were then taken to collaborate with local partners in an effort to resolve those issues that could not be addressed using ICT.

Confronted with a mountain of extremely difficult issues to be overcome, we are only just now embarking on this challenge of major substance. Moving forward, we hope to create new value for the world.

Creating New Value for Society while Fulfilling the Dreams of Children

We had numerous discussions with partners in an effort to fully grasp the nature of local issues and needs. It was with a significant sense of relief and responsibility that the services provided had a greater than expected positive effect on children, who genuinely enjoyed the opportunity to receive an education. Clearly the expectations of parents and guardians were also substantial.

Our efforts in Indonesia have only just begun. Moving forward, we will do our utmost to deliver better content and services to as many regions and children as possible.

Kashin Shu
Account Executive
Public Sector Sales Group
Third Sales Division
Children Can Study without Anxiety

Children do not normally have the opportunity to come into contact with ICT. As a parent, I was worried that my child would be able to properly use these services. I was relieved and happy to see the bright and energetic way my child was participating in this learning experience.

(Comments from a parent)

Whether at home or at school, I had never come into contact with ICT. Everything was so new, and the experience so enjoyable that I completely lost track of time. I want to learn much more.

(Comments from a child)

Toward a Project that Covers All of Asia

From Indonesia to Asia and then on to the World

Education, and particularly elementary education, is essential for life in general. I strongly believe that it is vital for children to work toward fulfilling their hopes and dreams. This is important not only for the children themselves, but also for the growth and development of each country. The issues that can be found in Indonesia are equally inherent in other parts of Asia and will undoubtedly become more prominent in other countries and regions including Africa, the Middle East, and South America in the future.

While filled with a strong sense of mission and responsibility, I cannot think of a more satisfying opportunity than to bring a service to people in need that generates a genuine sense of joy. With this in mind, I plan to do my very best.

Terufumi Takada
Director, Sales
Public Sector Sales Group
Third Sales Division
CSR Report 2012

Detailed Information

Details of the Group’s approach toward compiling and issuing this report as well as supplementary information and data.

- **Corporate Information**
  Corporate Profile of the NTT Communications Group’s.

- **Business and Society**
  The NTT Communications Group is endeavoring to expand its global business while placing the utmost importance on society’s concerns and needs.

- **CSR Report Editorial Policy**
  Information about our policy and approach toward creating the digest editions and detailed editions, our methodology for choosing key information to report, and a profile of the report.

- **Third-Party Opinion**
  An opinion from Malik Salts, President of the ASU International LLC.

- **GRI Guidelines Comparison 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 Comparison 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).

- **Questionnaire**
  Please feel free to fill out a questionnaire on this website. We appreciate your feedback and thoughts about our report.

- **2011 Questionnaire Results**
  Below are the results of the CSR Report 2011 questionnaire that we received from our readers last year.

- **Contact Us**
  If you have any questions or suggestions about the report, please feel free to send them directly to us via our website.

- **PDF Download / Back Issues**
  PDF of the digest editions and PDF of the detailed editions are published. Back issues from fiscal 2003 onward are also available for download.

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CSR Report 2012

Corporate Information

Name: NTT Communications Corporation
Address: 1-1-6 Uchisaiwa-cho, Chiyoda-ku, Tokyo, Japan 100-8019
Date established: July 1, 1999
Paid-in capital: 211.7 billion yen (as of March 31, 2012)
Number of employees: 8,000 (as of March 31, 2012)

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)

Operating Revenues (billion yen):
- FY2009: 1,259.6
- FY2010: 1,079.2
- FY2011: 1,033.4

Operating Income (billion yen):
- FY2009: 98.2
- FY2010: 97.9
- FY2011: 105.7

Number of Employees:
- FY2009: 835
- FY2010: 815
- FY2011: 800

Global Awards and Recognition

NTT Communications has been recognized as “World Class” in a customer satisfaction survey conducted by the U.K.-based Telemark Services for four consecutive years. In addition to this World Class recognition, the Company has received Diamond and Gold awards.

Source: Telemark Services “Global dataVPN NTT Com Highlights: February 2010”

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Business and Society

Our Business Deeply Rooted in Society

The NTT Communications Group's mission is to "Bridge the World." Guided by this mission statement, we offer a breadth of services worldwide centered on our core Domestic and International Telecommunications Services.

Global ICT Partner


The NTT Communications Group’s Growth Strategy: Vision 2015 shines a light on its unwavering commitment to provide innovative, highly reliable, and seamless ICT services to customers in Japan and overseas.

"Innovative"

Our Innovative ICT services, including cloud computing, enable customers to succeed in this increasingly complex world. We anticipate both market trends and needs to develop innovative services ahead of the curve, giving our customers an important advantage.

"Reliable"

As a reliable global ICT partner, we provide high-quality services that earn the customer’s trust. Reliability is emphasized in everything we offer, including applications, services, operations and maintenance, backed by our robust global infrastructure of networks, data centers and much more.

"Seamless"

ICT services are provided on a seamless basis in markets worldwide, supported by the comprehensive standardization of our global operations as well as services. Customers promptly receive the consistent, high-quality ICT services they require no matter where in the world they may be.

Our Missions is to "Bridge the World."

As a partner that helps customers bridge their present and future potential, the NTT Communications Group will continue to support efforts aimed at realizing a prosperous society where people can lead secure and comfortable lives through ICT solutions.

Contribution to society, people, and the environment in every possible location throughout the world in a manner that is unique to the NTT Communications Group

Providing Global Support

The NTT Communications Group consistently provides the underlying support that allows people to lead prosperous lives through a global operating network, diverse human resources, and sound business platform.
Major Group Companies

Companies in which NTT Communications maintains an equity interest of 50% or more or that have executed Group agreements (as of March 31, 2012)

**Overseas**
- **The Americas**
  - NTT America, Inc.
  - NTT do Brasil Telecomunicações Ltda.
  - NTT Multimedia Communications Laboratories, Inc.
- **Europe**
  - NTT Europe Ltd.
- **Asia/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.
  - Emerso GlobeSoft Pte. Ltd.
  - PT. NTT Indonesia
  - Shanghai NTT Telecommunications Engineering Co., Ltd.

**Japan**
- NTT Worldwide Telecommunications Corporation
- NTT Com Technology Corporation
- NTT Co, CHEO Corporation
- NTTPC Communications, Inc.
- NTT Com Solution & Engineering Corporation
- Digital Forest Inc.
- NTT Fleta Inc.
- NTT Bizlink, Inc.
- NTT Navispace Corporation
- NTT World Engineering Marine Corporation
- NTT Resonant Inc.
- NTT SmartTrade Inc.
- X-LISTING Co., Ltd.

**Total Number of Consolidated Subsidiaries** 99

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*Corporate information  Business and Society  CSR Report Editorial Policy  Third-Party Opinion  GRI Guidelines Comparison Table  Environmental Reporting Guidelines Comparison Table  Questionnaire  2011 Questionnaire Results  Contact Us  PDF Download / Back Issues*
CSR Report 2012

CSR Report Editorial Policy

About the CSR Report

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 the provision of telecommunications services. We have issued this report to clearly convey our CSR approach and activities to our stakeholders. 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.

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 to 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 those 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 2012 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

Report Profile

- Reference Guidelines
  - GRI (Global Reporting Initiative)
  - Version 3.0 of the GRI’s Sustainability Reporting Guidelines
  - Japan’s Ministry of the Environment’s Environmental Reporting Guidelines (Fiscal Year 2012 Version)
  - Japan’s Ministry of the Environment's Environmental Accounting Guidelines 2005
  - ISO 26000: 2010, Guidance for social responsibility

*Report compliance with the GRI’s Sustainability Reporting Guideline 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. Makiko Saito of ASU International LLC kindly provided her opinion for the 2012 edition of the report.

• 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 2011: April 1, 2011 to March 31, 2012
(some content may fall outside this timeframe)

• Issue Dates
This report: November 2012
(Previous edition: November 2011; Next report: Scheduled for November 2013)

About the Reporting Medium
This website provides a comprehensive presentation of the content of the NTT Communications Group CSR Report 2012. This report comprises two parts: an abridged version; and detailed version. We aim to provide information effectively by taking into consideration those readers envisioned for each medium. As can be expected of a company that provides ICT services, an electronic format of NTT Communications’ CSR Report has been provided from 2012.
The abridged version presents the NTT Communications Group’s more important CSR activities in a clear, straightforward manner to the general public.
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.

NTT Communications has renewed its website in an effort to enhance the convenience of users.
Moving forward, we kindly request the continued support and understanding of all stakeholders.
Third-Party Opinion

Maki Saito
CSR Consultant, President of ASU International LLC

After graduating from college, Ms. Saito entered Dentou Inc., a leading advertising agency in Japan. Graduated with a Master's degree in international affairs from Columbia University School of International and Public Affairs in New York, U.S.A. Currently, President of ASU International LLC and a CSR consultant to numerous companies in Japan and the United States. Assistant Professor at GSE Graduate School, Board Member of the Human Security Forum of Tokyo University and a member of the Expert Committee of the Mogro Environmental Declaration Council. Authored such books as "100 Simple Ways to Change the World for the Better" and "Social Entrepreneurship: New Trends in the Social Responsibility Business." Translated and provided commentary for "The Social Venture Network Series."

For the purposes of writing this third-party opinion, I spoke with the NTT Communications people in charge of the CSR Report, read the CSR Report 2012 and website information, and was shown around the Tokyo No. 5 Data Center.

Focusing on "Bridging the World; and Expanding into New Horizons" in this year's report, NTT Communications is an enterprise that contributes these actions to society in the course of conducting its core businesses. What comes across from the report is that, while responding to a host of changes in its markets such as increasingly borderless economies, the spread of cloud computing, and the diversification of peoples’ values, the Company has enhanced its ICT services, which draw on its overall strengths as a Group, and is working on a variety of needs not only in Japan but also overseas. I gained the impression that every effort is being put into the Company and into building a ubiquitous society that embodies consideration for the natural environment; so that people can live with peace of mind in safety and convenience. These activities enable assessment of the lessons learned from such disasters as the Great East Japan Earthquake and floods in Thailand.

The efforts made at the No. 5 Data Center are particularly worthy of note. The Company has achieved thorough security by means of organic recording equipment, including high shock resistance to withstand an earthquake of the same intensity as the Great East Japan Earthquake, as well as a more stable power supply by such means as an uninterruptible power supply.

Of these, the cutting-edge green capabilities attracted my interest. Aisle capping, by which released hot air is prevented from circulating back into IT equipment racks, and SmartDASH, which improves the overcooling of server rooms, are contributing to enhanced air conditioning efficiency. Surprisingly, I felt very comfortable, neither too hot nor too cold, when walking around the server room. Including the use of concrete building materials to control exterior building heat, the Company is also making extensive use of such methods as LED lighting, solar power, rainwater and planting (green walls) and could be seen to be making an overall effort to reduce power consumption. I think that such considerations are producing results and account for the high level gains in power usage obtained at the Company's data centers in Japan. NTT Communications refers to this simply as "green ICT." However, environmental considerations are not confined to Japan alone, as the Company also operates data centers overseas, including in Singapore and Taiwan, and is raising its profile as a "global green ICT company."

The enthusiasm that NTT Communications shows for globalization is not purely from the "tangible" technological aspect, as the Company has also started to enhance the "intangible" human aspect. For example, the recently launched initiative to provide educational support in Indonesia and the Company's active engagement in the program by which employees are seconded overseas and those from overseas receive training in Japan, show its willingness to encourage its strength in having diverse values and experience.

The question is how NTT Communications' culture of responding flexibly and in a painstaking manner to people's needs has been developed. This is none other than by strict corporate governance: producing a Group CSR Charter and common CSR Group manual, selecting priority activity items and thoroughly implementing them, and putting in place a support system that steadily carries out a PlanDoCheckAction (PDCA) cycle. Steadily implementing the "easier said than done" can be read from the report. Assessing these initiatives that are factored into domestic and overseas social responsibility investment indices is convincing.

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Besides promoting global development in the years to come, the fields in which I expect the NTT Communications Group to be particularly prominent are medicine, disaster prevention, education and the environment. By that I mean deriving global strength from the experience the Group has gained in Japan. Located in an earthquake zone, Japan is also an aging society. At the same time, Japanese society is education-minded, boasting a high university entrance rate, and also possesses a high degree of environmental awareness, as evidenced by the large number of companies that have obtained ISO 14001 certification. I believe that Japan, a country that combines a number of challenges and strengths, can leverage its abilities in uncovering and solving issues accumulated from the former and the expertise that has arisen as a result of the latter in global development. On this occasion, I will cite “sharing” in addition to the keywords “Bridging the World; and Expanding into New Horizons.” The real strength of a Japanese company is probably “bridging and expanding” by sharing the things it possesses. I would also like to mention the holding of the “Dream Idea Contest” outside the Company and outside Japan to prompt wide-ranging opinions in a variety of fields. From the success of the Tsumugi Project - aimed at supporting restoration of areas affected by the Great East Japan Earthquake - the potential was seen for the “development of social problem-solving from a radius of five meters into a global business.” The part NTT Communications plays as a leader in the ICT industry is immense.
# CSR Report 2012

## GRI Guidelines Comparison Table

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<thead>
<tr>
<th>G3 Disclosure</th>
<th>Indicator</th>
<th>Reported Information</th>
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<tbody>
<tr>
<td><strong>1 Strategy and Analysis</strong></td>
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<tr>
<td>1.1</td>
<td>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.</td>
<td>Top Message</td>
</tr>
<tr>
<td>1.2</td>
<td>Description of key impacts, risks, and opportunities.</td>
<td>Approach to CSR</td>
</tr>
<tr>
<td><strong>2 Organizational Profile</strong></td>
<td></td>
<td></td>
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<tr>
<td>2.1</td>
<td>Name of the organization.</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.2</td>
<td>Primary brands, products, and/or services.</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.3</td>
<td>Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.</td>
<td>Corporate Information, Business and Society</td>
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<tr>
<td>2.4</td>
<td>Location of organization’s headquarters.</td>
<td>Corporate Information, Business and Society</td>
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<tr>
<td>2.5</td>
<td>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.</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.6</td>
<td>Nature of ownership and legal form.</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.7</td>
<td>Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.8</td>
<td>Role of the reporting organisation, including: - Number of employees; - Net sales (for private sector organisations) or net revenues (for public sector organisations); - Total capitalization broken down in terms of debt and equity (for private sector organisations); and - Quantity of products or services provided.</td>
<td>Corporate Information, Business and Society</td>
</tr>
<tr>
<td>2.9</td>
<td>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).</td>
<td>Not applicable</td>
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<td>2.10</td>
<td>Awards received in the reporting period.</td>
<td>Assessment by External Organizations, Corporate Information</td>
</tr>
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<td><strong>3 Report Parameters</strong></td>
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<tr>
<td>Report Profile</td>
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<tr>
<td>3.1</td>
<td>Reporting period (e.g., fiscal/financial year) for information provided.</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.2</td>
<td>Date of most recent previous report (if any).</td>
<td>Report Profile</td>
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<tr>
<td>3.3</td>
<td>Reporting cycle (annual, biannual, etc.).</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.4</td>
<td>Contact point for questions regarding the report or its contents.</td>
<td>Contact Us</td>
</tr>
<tr>
<td>Report Scope and Boundary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Process for defining report content, including: - Determining materiality; - Prioritizing topics within the report; and - Identifying stakeholders the organization expects to use the report.</td>
<td>Editorial Policy</td>
</tr>
<tr>
<td>3.6</td>
<td>Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, and suppliers).</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.7</td>
<td>State any specific limitations on the scope or boundary of the report.</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.8</td>
<td>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.</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.9</td>
<td>Date 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.</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.10</td>
<td>Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers or acquisitions, change of base year periods, nature of business, measurement methods).</td>
<td>Report Profile</td>
</tr>
<tr>
<td>3.11</td>
<td>Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.</td>
<td>Report Profile</td>
</tr>
</tbody>
</table>

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## GRI Content Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.12</td>
<td>Topic identifying the location of the Standout Disclosures in the report.</td>
<td>This table</td>
</tr>
<tr>
<td>3.13</td>
<td>Policy and current practices 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).</td>
<td>Third-Party Opinion</td>
</tr>
</tbody>
</table>

### 4 Governance, Commitments, and Engagement

#### Governance

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Governance structure of the organization, including committee under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.2</td>
<td>Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization, management and the reasons for this arrangement).</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.3</td>
<td>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.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.4</td>
<td>Mechanism for stakeholders and employees to provide recommendations or direction to the highest governance body.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.5</td>
<td>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).</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.6</td>
<td>Processes in place for the highest governance body to ensure conflicts of interest are avoided.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.7</td>
<td>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.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.8</td>
<td>Making Contributions in a Manner that is Unique to the NTT Communications Group</td>
<td>Making Contributions in a Manner that is Unique to the NTT Communications Group</td>
</tr>
<tr>
<td>4.9</td>
<td>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 to international standards, codes of conduct, and principles.</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>4.10</td>
<td>Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.</td>
<td>Corporate Governance</td>
</tr>
</tbody>
</table>

#### Commitments to External Initiatives

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.11</td>
<td>Explanation of whether and how the precautionary approach or principle is addressed by the organization.</td>
<td>Business Risk Management</td>
</tr>
<tr>
<td>4.12</td>
<td>Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.</td>
<td>Special Feature on Biodiversity on the &quot;eco-net&quot; Portal Acquisition of the eco-NICT Mark</td>
</tr>
<tr>
<td>4.13</td>
<td>Memberships in associations such as industry associations and/or national and 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.</td>
<td>Corporate Information Business and Society</td>
</tr>
</tbody>
</table>

#### Stakeholder Engagement

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.14</td>
<td>List of stakeholder groups engaged by the organization.</td>
<td>Making Contributions in a Manner that is Unique to the NTT Communications Group Responsibilities as a Member of Society</td>
</tr>
<tr>
<td>4.15</td>
<td>Basis for identification and selection of stakeholders with whom to engage.</td>
<td>Making Contributions in a Manner that is Unique to the NTT Communications Group Responsibilities as a Member of Society</td>
</tr>
<tr>
<td>4.16</td>
<td>Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.</td>
<td>Faithfully Serving Our Customers Our Relationship with Society - Our Relationship with Suppliers A Workspace for Everyone Respecting Human Rights</td>
</tr>
<tr>
<td>4.17</td>
<td>Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to these key topics and concerns, including through its reporting.</td>
<td>Promoting Diversity Creating More Satisfying Workplaces</td>
</tr>
</tbody>
</table>
## 5 Management Approach and Performance Indicators

### Economic

#### aspect: Economic Performance

| EC1 | CORE | Disclosure on Management Approach | -Top Message |
| EC2 | 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 Indicators 2011-2012 |
| EC3 | CORE | Financial implications and other risks and opportunities for the organization’s activities due to climate change. | - |
| EC4 | CORE | Coverage of the organization’s defined benefit plan obligations. | - |
| EC5 | 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 significant locations of operation. | - |

#### aspect: Indirect Economic Impacts

| EC8 | CORE | Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, non-profit, or pro bono engagement. | -Reliably and Securely Bridging the World -Maintaining Stable and Reliable Telecommunications Services -Information Security in Telecommunications Services -Our Relationship with Society |
| EC9 | ADD | Understanding and describing significant indirect economic impacts, including the extent of impacts. | -Top Message -Business Risk Management |

### Environmental

#### 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. | -Preventing Global Warming |
| EN4 | CORE | Indirect energy consumption by primary source. | -Preventing Global Warming |
| EN5 | ADD | Energy saved due to conservation and efficiency improvements. | -Preventing Global Warming |
| 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. | -Preventing Global Warming |
| EN7 | ADD | Initiatives to reduce indirect energy consumption and reductions achieved. | -Preventing Global Warming |

#### 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

<p>| 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. | - |</p>
<table>
<thead>
<tr>
<th>aspect: Emissions, Effluents, and Waste</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 16 (CORE)</td>
<td>Total direct and indirect greenhouse gas emissions by weight.</td>
</tr>
<tr>
<td>Emission 17 (CORE)</td>
<td>Other relevant indirect greenhouse gas emissions by weight.</td>
</tr>
<tr>
<td>Emission 18 (ADD)</td>
<td>Initiatives to reduce greenhouse gas emissions and reductions achieved.</td>
</tr>
<tr>
<td>Emission 20 (CORE)</td>
<td>NOx, SOx, and other significant air emissions by type and weight.</td>
</tr>
<tr>
<td>Emission 21 (CORE)</td>
<td>Total water discharge by quality and destination.</td>
</tr>
<tr>
<td>Emission 22 (CORE)</td>
<td>Total weight of waste by type and disposal method.</td>
</tr>
<tr>
<td>Emission 23 (CORE)</td>
<td>Total number and volume of significant spills.</td>
</tr>
<tr>
<td>Emission 24 (ADD)</td>
<td>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.</td>
</tr>
<tr>
<td>Emission 25 (ADD)</td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Products and Services</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 26 (CORE)</td>
<td>Interventions to mitigate environmental impacts of products and services, and extent of impact mitigation.</td>
</tr>
<tr>
<td>Emission 27 (CORE)</td>
<td>Percentage of products sold and their packaging materials that are reclaimed by category.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Compliance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 28 (CORE)</td>
<td>Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Transport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 29 (ADD)</td>
<td>Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Overall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 30 (ADD)</td>
<td>Total environmental protection expenditures and investments by type.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Labor Practices and Decent Work</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure on Management Approach</td>
<td>Human Resources Development and Evaluation</td>
</tr>
<tr>
<td></td>
<td>A Workplace for Everyone</td>
</tr>
<tr>
<td></td>
<td>Creating and Improving Employee Health</td>
</tr>
<tr>
<td></td>
<td>Promoting Diversity</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 31 (CORE)</td>
<td>Total workforce by employment type, employment contract, and region.</td>
</tr>
<tr>
<td>Emission 32 (CORE)</td>
<td>Total number and rate of employee turnover by age group, gender, and region.</td>
</tr>
<tr>
<td>Emission 33 (ADD)</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Labor/Management Relations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 34 (CORE)</td>
<td>Percentage of employees covered by collective bargaining agreements.</td>
</tr>
<tr>
<td>Emission 35 (CORE)</td>
<td>Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aspect: Occupational Health and Safety</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission 36 (ADD)</td>
<td>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.</td>
</tr>
<tr>
<td>Emission 37 (CORE)</td>
<td>Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.</td>
</tr>
<tr>
<td>Emission 38 (CORE)</td>
<td>Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.</td>
</tr>
<tr>
<td>Emission 39 (ADD)</td>
<td>Health and safety topics covered in formal agreements with trade unions.</td>
</tr>
</tbody>
</table>
## CSR Report 2012

### Training and Education

**LA10**: Core - Average hours of training per year per employee by employee category.

**LA11**: Core - Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.

**LA12**: Core - Percentage of employees receiving regular performance and career development reviews.

### Diversity and Equal Opportunity

**LA15**: Core - Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.

**LA14**: Core - Ratio of basic salary of men to women by employee category.

### Human Rights

- **Disclosure on Management Approach**
- **Respecting Human Rights**

### 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**: Core - 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.

### Non-Discrimination

**HR4**: Core - Total number of incidents of discrimination and actions taken.

### 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.

### 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.

### 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.

### Security Practices

**HR8**: Core - Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.

### Indigenous Rights

**HR9**: Core - Total number of incidents of violations involving rights of indigenous people and actions taken.

### Society

- **Disclosure on Management Approach**
- **Compliance**
- **Our Relationship with Society**

### Community

**SO1**: Core - Nature, scope, and effectiveness of any programs and activities that assess and manage the impacts of operations on communities, including entering, operating, and exiting.

### 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.

### Public Policy

**SO5**: Core - Public policy positions and participation in public policy development and lobbying.

**SO6**: Core - Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.

---

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## CSR Report 2012 (Online Version)

### aspect: Anti-Competitive Behavior

<table>
<thead>
<tr>
<th>SOT</th>
<th>ADD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.</td>
</tr>
</tbody>
</table>

### aspect: Compliance

<table>
<thead>
<tr>
<th>S08</th>
<th>C0RE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.</td>
</tr>
</tbody>
</table>

### aspect: Water

- Disclosure on Management Approach

### aspect: Customer Health and Safety

<table>
<thead>
<tr>
<th>PR1</th>
<th>C0RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>-</td>
</tr>
<tr>
<td>PR2</td>
<td>ADD</td>
</tr>
<tr>
<td>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.</td>
<td>-</td>
</tr>
</tbody>
</table>

### aspect: Product and Service Labeling

<table>
<thead>
<tr>
<th>PR3</th>
<th>C0RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.</td>
<td>-</td>
</tr>
<tr>
<td>PR4</td>
<td>ADD</td>
</tr>
<tr>
<td>Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.</td>
<td>-</td>
</tr>
<tr>
<td>PR5</td>
<td>ADD</td>
</tr>
<tr>
<td>Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.</td>
<td>Improving Customer Satisfaction</td>
</tr>
</tbody>
</table>

### aspect: Marketing Communications

<table>
<thead>
<tr>
<th>PR6</th>
<th>C0RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.</td>
<td>-</td>
</tr>
<tr>
<td>PR7</td>
<td>ADD</td>
</tr>
<tr>
<td>Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.</td>
<td>-</td>
</tr>
</tbody>
</table>

### aspect: Customer Privacy

| PR8 | ADD |
| Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. | - |

### aspect: Compliance

| PR9 | C0RE |
| 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

<table>
<thead>
<tr>
<th>G3 Disclosure</th>
<th>Indicator</th>
<th>Reported Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Operations</td>
<td>Investment</td>
<td>Capital investment in telecommunication network infrastructure broken down by country/region.</td>
</tr>
<tr>
<td></td>
<td>ID 1.</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>ID 2.</td>
<td>Not 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.</td>
</tr>
<tr>
<td></td>
<td>ID 3.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>ID 4.</td>
<td>Compliance with ICNIRP (International Commission on Non-Ionizing Radiation Protection) standards on exposure to radiofrequency (RF) emissions from handsets.</td>
</tr>
<tr>
<td></td>
<td>ID 5.</td>
<td>Compliance with ICNIRP (International Commission on Non-Ionizing Radiation Protection) guidelines on exposure to radiofrequency (RF) emissions from base stations.</td>
</tr>
<tr>
<td></td>
<td>ID 6.</td>
<td>Policies and practices with respect to Specific Absorption Rate (SAR) of handsets.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>ID 7.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>ID 8.</td>
<td>Number and percentage of stand-alone sites, shared sites, and sites on existing structures.</td>
</tr>
</tbody>
</table>
## Providing Access

### Access to Telecommunication Products and Services: Bridging the Digital Divide

**PA 1.** Policies and practices to enable the deployment of telecommunication infrastructure and access to telecommunication products and services in remote and low population density areas. Include an explanation of business models applied.

- Information Security in Telecommunication Services
- Using ICT to Solve Social Issues
- Faithfully Serving Our Customers

**PA 2.** Policies and practices to overcome barriers for access and use of telecommunication products and services including language, culture, literacy, and lack of education, income, disabilities, and age. Include an explanation of business models applied.

- Reliability and Security Bridging the World
- Maintaining Stable and Reliable Telecommunications Services
- Information Security in Telecommunication Services

**PA 3.** Policies and practices to ensure availability and reliability of telecommunication products and services and quantify, where possible, for specified time periods and locations of down time.

- Reliability and Security Bridging the World
- Maintaining Stable and Reliable Telecommunications Services
- Information Security in Telecommunication Services

**PA 4.** Quantify the level of availability of telecommunication products and services in areas where the organization 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 rate, 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.

- Reliability and Security Bridging the World
- Maintaining Stable and Reliable Telecommunications Services
- Activities related to the Great East Japan Earthquake

### Access to Content

**PA 7.** Policies and practices to manage human rights issues relating to access and use of telecommunication 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 spam or potentially unethical content
- Protecting vulnerable groups such as children.

- 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 provided 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 organization.

- -

**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.** Describe any measures of transport and/or resource changes of customer use of the telecommunication products and services listed above. Provide some indication of some, market size, or potential savings.

- Reducing Environmental Impact through Our Services

**TA 4.** Describe 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.

- -

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Corresponding links to other sections of the report are included at the bottom of the page.
## Environmental Reporting Guidelines Contrast Table

### 1) Basic Information (BI)

<table>
<thead>
<tr>
<th>Items</th>
<th>Reported Information</th>
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<td>BI-1 CEO’s statement</td>
<td>- Top Message</td>
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<td>BI-2 Fundamental requirements of reporting</td>
<td>- Report Profile</td>
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<tr>
<td>BI-2-1 Organizations, periods and areas covered by the reporting</td>
<td>- Editorial Policy</td>
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<tr>
<td>BI-2-2 Boundary of the reporting organization and coverage of environmental impacts</td>
<td>- Corporate Information</td>
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<tr>
<td>BI-3 Summary of the organization’s business (including management indices)</td>
<td>- Business and Society</td>
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<tr>
<td>BI-4 Outline of environmental reporting</td>
<td>- Corporate Information</td>
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<td>BI-4-1 List of major indicators</td>
<td>- Prevention of Environmental Pollution</td>
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<tr>
<td>BI-4-2 Summary of objectives, plans and results regarding environmental initiatives</td>
<td>- Environmental Impact of Business Activities</td>
</tr>
<tr>
<td>BI-5 Material balance of organizational activities (inputs, internal recycling, and outputs)</td>
<td>- Fiscal 2011 Results and Fiscal 2012 Targets</td>
</tr>
</tbody>
</table>

### 2) Information and Indicators that Describe the Status of Environmental Management (MPI = Management Performance Indicators)

| MPI-1 Status of environmental management                             | - Basic Philosophy and Environmental Management                                    |
| MPI-1-1 Environmental policy in organizational activities          | - Basic Philosophy and Environmental Management                                    |
| MPI-2 Status of environmental management systems                    | - Basic Philosophy and Environmental Management                                    |
| MPI-2 Status of compliance with environmental regulations           | - Prevention of Environmental Pollution                                             |
| MPI-3 Environmental accounting information                          | - Environmental Accounting                                                         |
| MPI-4 Status of environmentally conscious investment or financing   | - Fiscal 2011 Results and Fiscal 2012 Targets                                      |
| MPI-5 Status of supply chain management for environmental conservation | - Our Relationship with Suppliers                                                  |
| MPI-6 Status of green purchasing or procurement                     | - Our Relationship with Suppliers                                                  |
| MPI-7 Status of research and development of new environmental technologies and DFE | - Preventing Global Warming                                                       |
| MPI-8 Status of environmentally friendly transportation             | - Preventing Global Warming                                                       |
| MPI-9 Status of biodiversity conservation and sustainable use of biological resources | - Biodiversity Conservation                                                        |
| MPI-10 Status of environmental communication                       | - Basic Philosophy and Environmental Management                                    |
| MPI-11 Status of social contribution related to the environment     | - Basic Philosophy and Environmental Management                                    |
| MPI-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**

| OPI-1 Total amount of energy input and reduction measures          | - Fiscal 2011 Results and Fiscal 2012 Targets                                   |
| OPI-2 Total amount of material input and reduction measures       | - Environmental Impact of Business Activities                                   |
| OPI-3 Amount of water input and reduction measures               | - Preventing Global Warming                                                     |

**Internal recycling**

| OPI-4 Amount of materials recycled within an organization’s operational area | - Fiscal 2011 Results and Fiscal 2012 Targets |

**Outputs**

| OPI-5 (Products)                                                      | Environmental Impact of Business Activities |

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### 4) Information and Indicators that Describe the Status of the Relationship between Environmental Considerations and Management

<table>
<thead>
<tr>
<th>EEI</th>
<th>Information and indicators for occupational health and safety</th>
<th>CSR Indexes 2011-2012</th>
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### 5) Information and Indicators that Describe the Status of Social Initiatives (Chapter 4)

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<th>Status of Social Initiatives</th>
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<td>Information and indicators for personal information protection</td>
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<td>-7</td>
<td>Information and indicators for the broad range of consumer protection and product safety</td>
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<td>Economic information and indicators for an organization’s social impacts</td>
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<td>-9</td>
<td>Information and indicators for other social matters</td>
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