

# CSR REPORT 2016

[Expanded Version]




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We

# NTT Communications CSR

Having created the Fundamental CSR Policy as a concept to be shared by all NTT Communications Group employees, we promote CSR activities throughout the entire Group. Continuing to contribute to the development of a sustainable society and creating value for society naturally requires companies to anticipate economic, social and environmental circumstances while attempting to mitigate any negative effects. Based on such an awareness of the issues, from 2015 to 2016 we updated the Fundamental CSR Policy in association with a reassessment of the priority issues (materiality) on a Groupwide basis.

## CSR Concept

### Fundamental CSR Policy

As a partner that links the present to the future, the NTT Communications Group contributes to the realization of a safe, comfortable and abundant society by working to solve social issues and create new value for society on a global scale through ICT.

#### ■ NTT Communications Group's Fundamental CSR Policy



#### Contributions to Society

We shall contribute to the resolution of social issues in Japan and overseas through the development and provision of innovative ICT, while providing highly reliable services for the sustained development of society.

As a group of companies that provides key infrastructure that supports society and protects our lifestyles, we shall provide secure environments for communications that are fortified against cybersecurity threats and resilient to natural disasters.



#### Contributions to the Global Environment

We shall endeavor to solve environmental problems on a global scale through initiatives to use ICT to reduce the impact of society on the environment, while lightening the environmental burden of our business activities as a Group.



#### Respect for Human Resources

We shall create work environments that invigorate each and every employee, while respecting the diversity of our employees and other stakeholders. Moreover, we shall contribute to the creation of an abundant society by changing ourselves for the better and seeking to break free from our own limitations.



#### Continuous Strengthening of Corporate Governance

While valuing opportunities to communicate with all our stakeholders, we shall contribute to the sustainable development of society by engaging in business with high ethical standards and respect for human rights.

### As a Member of the NTT Group

In recent years, there have been strong demands made for a commitment to a sustainable society on a global scale. These demands include the adoption of Sustainable Development Goals (SDGs) by the United Nations and the Paris Agreement by the 21st Conference of the Parties (COP21).

Given these circumstances, each NTT Group company revised the NTT Group CSR Priority Activities that represent key issues (materiality) to promote unified CSR and formulated the NTT Group CSR Charter in May 2016.

Based on the revised NTT Group CSR Charter, the NTT Communications Group is engaged in resolving social issues on an ongoing and Groupwide basis.



### Establishment of NTT Group CSR Committee

In fiscal 2015, the NTT Group established an NTT Group CSR Committee, chaired by the NTT Group CSR Committee chairman (a representative director and senior executive vice president) and comprising the chief CSR executives (senior executive vice presidents, executive vice presidents) from the eight main NTT Group companies, and works for the adoption of CSR management across the Group.

### Participation in NTT Group CSR Conferences

Working to deepen employee CSR awareness by sharing on a Groupwide basis the NTT Group's best practice CSR-related measures, NTT Communications has held the NTT Group CSR Conference since fiscal 2013 with the aim of giving consideration to the forms CSR and social responsibility should take in the years to come.

NTT Communications announced three domestic best practice measures and overseas Group company Netmagic Solutions gave a special lecture.

### Establishment of Priority Activities in Line with Fundamental Policy

Having decided on the medium-term targets and guidelines to steadily disseminate and put into practice the Fundamental CSR Policy, NTT Communications has been stipulating CSR Priority Activities based on an analysis of their importance and deploying PDCA activities since 2011. Specifically, in line with the four priority areas tied in with the Fundamental CSR Policy, NTT Communications set CSR Indexes as specific targets and worked on continuous improvements. For the content of and our achievements in each priority area, please refer to each section of this report.

## Establishment of New Priority Activities

### Fifth-Year Activity Review

Although accurately based on social circumstances and needs, it is necessary to review the medium-term targets and guidelines for CSR activities from time to time. Taking that opportunity marked by the fifth year since the establishment of the priority activities, we conducted a general overview. In specific terms, in 2015 and 2016 we looked back at and updated our Fundamental CSR Policy and priority activities and implemented a reassessment of any materiality that is having important implications.

### Reassessment of Materiality

While taking into account economic, social and environmental circumstances that are continuing to undergo change, the reassessment of materiality plays an important role in achieving an exact CSR activities system to meet society's expectations. From this perspective, for this verification, we firstly prepared for then conducted a general overview and review of CSR activities while referring to international perspectives and guidelines. Having comprehensively listed achievements and any issues outstanding, we implemented refinements and systematized activities that included inputs from external experts and communications specialists to take into account stakeholders' points of view. As a result of these verifications, we formulated new and priority activities on which to focus again over the next five years in each of the four priority areas.

## Analytical Process

### STEP 1

#### Comprehensive general overview of activities and recognition of challenges based on international guidelines, etc.

- October 2015 Started internal consultations geared toward materiality, Fundamental CSR Policy and reformulation
- December 2015 Started comprehensive analysis

#### <Perspectives Taken into Account/Guidelines>

GRI	Sustainability Reporting G4 Guidelines
SASB	Sustainability Accounting Standards
ISO 26000	CSR Activities Guidance
The United Nations	Global Compact (GC), Sustainable Development Goals (SDGs)
RobecoSAM	Corporate Sustainability Assessment (CSA)

### STEP 2

#### Inclusion of external experts, assessment and reassessment of priority activity areas/categories

- February 2016 First drafts of revised editions of priority areas/ priority activities completed and circulated to experts
- April 2016 Held final study group meeting to which external experts invited, final draft completed

#### <External Experts and Specialists Who Participated>

Kaori Kuroda	Executive Director CSO Network Japan
Masaatsu Doi	Professor Hosei University Graduate School of Social Well-being Studies
(Coordination)	
Tsuyoshi Izume	Senior Director Cross Insight, Inc.



### STEP 3

#### Decide levels of importance for the Company, formulation of medium-term targets (KPIs)

- April 2016 Started consultation meetings with each internal department toward formulation of KPIs
- June 2016 Revised Fundamental CSR Policy and priority activities brought up at Board of Directors' meeting
- September 2016 Final decision on same (in part formulated in June)
- October 2016 Revised Fundamental CSR Policy and priority activities made public

## New Priority Activities and Medium-Term Targets for Fiscal 2016 Onward

Priority Areas	Priority Activities	Activity Measures	Why Important?	Management Approach		Boundaries	
				Medium-Term Targets (Form We Want to Take in Five Years' Time)	Targets for Current Fiscal Year	Scope of Activities (Within/Outside Organization)	Scope
Continuous Strengthening of Corporate Governance	Compliance	Raising of awareness in/ dissemination to Group	Compliance with laws and regulations is the basis of sustainable management, and we believe that the ongoing raising of awareness is essential to putting compliance into practice.	A model company that puts into practice corporate ethics, including compliance with laws, social norms and internal rules.	<ul style="list-style-type: none"> <li>From upper echelons of management, sending out of senior management messages concerning corporate ethics for entire Company</li> <li>Implementation of job level-based training sessions, such as compliance seminars geared toward senior executives, compliance training for all full-time and temporary employees, rank-based training such as for new employees, etc.</li> <li>Dissemination of Global Compliance Regulations formulated in previous fiscal year</li> </ul>	Within	Group Companies in Japan and overseas
		Appropriate prevention of response to violations		<ul style="list-style-type: none"> <li>Maintenance/operation of points of contact that enable consulters and the filers of reports to report with peace of mind when necessary</li> <li>Thorough protection for the filers of reports</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance/operation of all types of contact points that enable responses in an appropriate and adequate manner to a range of consultation/report content, implementation of information acceptance in foreign languages</li> <li>NTT Group Corporate Ethics Help Line that has a law office as a point of contact</li> <li>NTT Communications Compliance Hotline</li> <li>Compliance Hotline in NTT Communications Group</li> <li>Workplace Problem Consultation Helpdesk that enables consultations on concerns that have arisen in the workplace</li> <li>Human Rights Consultation Helpdesk</li> </ul>	Within	Group Companies in Japan
	Respect for Human Rights	Raising of awareness in/ dissemination to Group	Being a global corporation demands the Groupwide promotion of respect for human rights and the prevention of complicity in violations.	Ascertain issues relating to the human rights education not only of NTT Communications and domestic Group companies but also overseas Group companies, strengthen human rights education efforts as a global corporation	Upgrades geared toward building of a Groupwide framework for promoting human rights education that includes overseas Group companies	Within	Group Companies in Japan and overseas
		Appropriate prevention of response to violations		<ul style="list-style-type: none"> <li>Enable the prevention of and appropriate response to human rights violations, build Companywide consultation/reporting mechanisms</li> </ul>	Building of points of contact that enable responses in an appropriate and adequate manner to a variety of consultations/reports as well as continuation of point of contact awareness promotion	Within/outside	Group Companies in Japan
		Promotion of thoroughness in respect for human rights through content and services		<ul style="list-style-type: none"> <li>Utilizing ICT, contribute to society's human rights awareness education</li> <li>Thorough elimination of elements conducive to human rights violations in content, services</li> </ul>	<ul style="list-style-type: none"> <li>To protect the human rights of children, ongoing access restrictions to "goo," "plala," and "OCN" services, based on ICOSA-provided child pornography website address lists</li> </ul>	Within/outside	Group Companies in Japan
	Risk Management	Ongoing Risk Management Structure Upgrades	As we are a company that carries the burden of operating mission-critical infrastructure, society's expectations are high in matters concerning our constant preparation for and appropriate responses to business crisis risks.	<ul style="list-style-type: none"> <li>Business risks: In addition to economic risk factors, continue appropriate responses to and build domestic/overseas management systems for environmental/social risk factors, including climate change and scarcity of resources</li> <li>Crisis risks: Building up of BCP measures to enable rapid responses to pandemics, natural disasters, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Business risks                             <ul style="list-style-type: none"> <li>Involve overseas Group company activities in domestic business risk management activities, implement upgrades to business risk management framework</li> </ul> </li> <li>Crisis risks                             <ul style="list-style-type: none"> <li>Implement the issuing of documentation on specific BCP measure initiatives for faster disaster responses</li> </ul> </li> </ul>	Within	Group Companies in Japan
	Information Security	Strengthening of Security Management	The appropriate management of confidential information, including personal information, is the most important obligation for those of us who are entrusted with our customers' valuable assets.	Deploy all types of measures to strengthen security management by collaboration not only among domestic Group companies but also with overseas Group companies	<ul style="list-style-type: none"> <li>Through collaboration with Group companies in Japan, strengthening of security management</li> <li>Process management strengthening to safely handle confidential information such as personal information</li> <li>Implementation of security training sessions by rank (attendance ratio of 100%) with the aim of improving security awareness and reducing incident occurrences</li> <li>Based on results of implemented information security surveys, improvement/strengthening of security implementation at each Group company</li> <li>Collaborative strengthening in response to security incidents, including cyber attacks</li> </ul>	Within	Group Companies in Japan
		Security Training Personnel		<ul style="list-style-type: none"> <li>As ICT professionals, devise training for security personnel to raise each and every person's response abilities with regard to security</li> <li>Fiscal 2020 target of more than 2,400 people (Advanced level: several people; intermediate level 1,900; elementary level 500 people)</li> </ul>	<ul style="list-style-type: none"> <li>Training by security human resources</li> <li>Elementary level: Implementation of program centered on acquiring knowledge relating to ICT</li> <li>Intermediate level: Implementation of program emphasizing security knowledge and tapping into business experience</li> </ul>	Within	Group Companies in Japan
		Appropriate Management of Personal Information		Continue to have a keenly developed sense of the importance of customer information while continuing to build sophisticated systems that guard against information leaks by utilizing state-of-the-art technologies	<ul style="list-style-type: none"> <li>Keeping Privacy Mark current</li> </ul>	Within	NTT Communications non-consolidated

Priority Areas	Priority Activities	Activity Measures	Why Important?	Management Approach		Boundaries	
				Medium-Term Targets (Form We Want to Take in Five Years' Time)	Targets for Current Fiscal Year	Scope of Activities (Within/ Outside Organization)	Scope
Contributions to Society	Innovation that supports a networked society	Provision of new value that contributes to business transformation	Regarding the contributions we have made through our businesses as unique to a leading ICT company, we provide innovation that helps to address social issues while innovating businesses and everyday lifestyles.	Utilizing the IoT and cloud technologies, develop and deploy a range of global seamless services in line with the business needs of corporate customers	• Actively launch new services, including IoT and cloud	Within/outside	Group Companies in Japan and overseas
		Realization of safe and secure daily lifestyles, bridging of the digital divide		Bridging the digital divide separating Japan from other countries, contribute to improvements in accessibility, develop services geared toward individual customers and build supply frameworks	• Launch new services geared toward improvements in OCN services and implement continuous functional enhancements	Within/outside	Group Companies in Japan and overseas
	Ensure highly stable and reliable mission-critical infrastructure	Development of disaster-resilient networks	The destabilization or interruption of ICT networks that form part of social infrastructure represent risks that would impact global economic activities.	To guard against loss of communications after a disaster has occurred, an ongoing process of making fundamental ICT facilities (buildings, steel towers, electric power, power lines/public works) more resilient	• Measures to prevent floods caused by latest hazards (plans for flood protection construction works at communications building in Osaka Prefecture) • Improvement in seismic performance by reinforcing the linings of pipelines	Within	Group Companies in Japan
		Measures to address major natural disasters		<ul style="list-style-type: none"> <li>• Continuous strengthening of planned response that assumes a hypothetical earthquake in the Nankai Trough, conducting of blind drill themes (drill format not made public to participants)</li> <li>• Gathering of disaster relief information for liaising with government and municipal bodies and making reporting processes faster and more operationally entrenched</li> <li>• Enhance liaison within NTT Communications Group</li> </ul>	<ul style="list-style-type: none"> <li>• Rush drill that assumes an earthquake has struck directly underneath the Tokyo metropolitan area at night on a Saturday or national holiday, first initial response drill involving west Japan initial response headquarters</li> <li>• Gathering of disaster information for personnel at west Japan initial response headquarters and entrenched implementation of external report processes</li> <li>• Opening of NTT Communications support bases for domestic Group companies</li> </ul>	Within	Group Companies in Japan
				Network surveillance 24 hours a day, 365 days a year	<ul style="list-style-type: none"> <li>• Constantly monitor customer services (networks, Internet, cloud, mails, hosting, voice services, etc.) to promote global-seamless operations</li> <li>• Construct framework to monitor global seamless networks</li> <li>• Ongoing reduction in number of long-term malfunctions</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in number of long-term malfunctions</li> <li>• Networks in Japan (more than three hours): 103 cases/year</li> <li>• Overseas networks (more than four hours): 400 cases/year</li> <li>• Other (CL, A&amp;C and voice, more than one hour): 71 cases/year (as the types of services handled has increased)</li> </ul>	Within/outside
	Robust network security for customers	Strengthening of vulnerability response functions	Making customer network system security more resilient is directly connected to the safeguarding of valuable customer assets.	Include overseas Group companies in addition to domestic Group companies in developing measures to strengthen vulnerability response functions	• Strengthening of vulnerability response functions, including at domestic Group companies - Embedded implementation of vulnerability assessment tasks (networks/applications/ penetration tests) and early implementation of fixes for any vulnerabilities that are discovered	Within	Group Companies in Japan
		Rapid and reliable responses to security threats		Continuous enhancements to and strengthening of services that contribute to safe and secure corporate and national information systems	<ul style="list-style-type: none"> <li>• Area expansion and increased sophistication of professional services that support the strengthening of risk management with regard to security measures</li> <li>• Increased sophistication of managed security services that visualize as well as support the rapid and accurate dealing with security threats</li> <li>• Formulation of and service menu entries for security measure models relating to SDx and the IoT</li> </ul>	Within/outside	Group Companies in Japan and overseas
	Continuous improvement in customer satisfaction	Ongoing CS surveys	Maintaining good relationships with customers is an indispensable part of the sustainability of the Company itself.	Continuous improvements in customer satisfaction level scores	<ul style="list-style-type: none"> <li>• Enhancement of satisfaction level survey recipients</li> <li>• Deployment of CS surveys to Group companies (expand scale of overseas Group company surveys)</li> <li>• "Kaizen (Improvement) Activities" based on customer feedback and thorough implementation of PDCA systems at domestic and overseas Group companies</li> </ul>	Within/outside	Group Companies in Japan and overseas
	Collaboration with suppliers	Spread of CSR and Green Procurement	The building of management frameworks responsible for entire supply chains is being demanded of global corporations.	<ul style="list-style-type: none"> <li>• Promote the procurement of products that show consideration has been given to environmental impact by having every supplier and company conduct product assessments</li> <li>• Prevention of complicity in anti-social behavior in the supply chain, as typified by conflict minerals issue</li> </ul>	Implementation of ongoing (annual) supplier surveys relating to CSR procurement promotion	Within/outside	NTT Communications non-consolidated
	Contribute to regional society and foster communities	Contributions to Communities	Developing activities to cultivate communities in addition to making local contributions, our posture of contributing to the robust development of society is that demanded by society.	Based on social contribution principles, such as sustainability, efficiency, due diligence, global perspective and skills, promote social contribution activities in a variety of fields	<ul style="list-style-type: none"> <li>• Ongoing implementation of neighborhood cleanup activities and deployment to Group companies</li> <li>• Holding of sales events (bread, sweets, etc.) in cooperation with local organizations that support people with disabilities</li> </ul>	Within/outside	Group Companies in Japan and overseas
Community/ Next-Generation Training		Leverage business characteristics, contribute to community support and training of the next generation, build strategic social contribution frameworks		Promoting activities geared toward children's healthy development by providing opportunities to understand more about the company, for example by experiencing workplaces, and by rugby classes given by the club that is our sponsored rugby team	Within/outside	Group Companies in Japan and overseas	

Priority Areas	Priority Activities	Activity Measures	Why Important?	Management Approach		Boundaries		
				Medium-Term Targets (Form We Want to Take in Five Years' Time)	Targets for Current Fiscal Year	Scope of Activities (Within/ Outside Organization)	Scope	
Contributions to the global environment	Creating a Low-Carbon Society	Cutting carbon emissions from businesses	We consider reducing the Company's carbon emissions and reducing the carbon emissions of the products and services we offer to be two sides of the same coin.	Implementing the following measures to reduce the Company's electricity consumption, we will reduce CO <sub>2</sub> emissions to 318,000 t-CO <sub>2</sub> or less (a reduction of more than 15% compared with the fiscal 2008 level) in fiscal 2020.	<ul style="list-style-type: none"> <li>Fiscal 2016 CO<sub>2</sub> emission amount of 272,000 t-CO<sub>2</sub> or less</li> <li>In communications and DC buildings, implement measures to reduce air-conditioning power consumption centered on removal of equipment that consumes large amounts of power, airflow improvements and optimization of room temperatures (255,000t-CO<sub>2</sub>)</li> <li>In office buildings, ongoing implementation of a raft of power-saving measures (17,000t-CO<sub>2</sub>)</li> </ul>	Within	Group Companies in Japan	
		Cutting society's carbon emissions through products and services		By providing services and ICT solutions, we will contribute to the saving of more than 2 million t-CO <sub>2</sub> in CO <sub>2</sub> emissions across the world in fiscal 2020.	By providing services and ICT solutions, we will contribute to the saving of more than 2 million t-CO <sub>2</sub> in CO <sub>2</sub> emissions across the world in fiscal 2020. To add Nexcenter to the assessed services that have received an Environmental Solutions Label	Within/outside	Group Companies in Japan	
	Promoting a Recycling-Oriented Society	Realization of a low environmental impact business model	Reducing the waste generated from the installation/operation of ICT equipment and office work are matters of great importance in the putting into practice of a recycling-oriented business.	Realization of a low environmental impact business model	<ul style="list-style-type: none"> <li>Building and maintenance of a low environmental impact business model</li> <li>Implementation of measures to reduce electricity use</li> <li>Installation of energy-saving equipment</li> <li>Appropriate management of hazardous substances</li> </ul>	Within	Group Companies in Japan and overseas	
		Thorough implementation of 3Rs policy in businesses		<ul style="list-style-type: none"> <li>Thorough implementation of a 3R policy—reduce, reuse and recycle—with regard to all the resources relevant to our business activities</li> <li>Improvement in final disposal rate for waste: final disposal rate of 2% or lower</li> <li>Amount of paper used per person (office paper, A4 size equivalent): 8,500 sheets (30% reduction compared with fiscal 2010 level)</li> </ul>	<ul style="list-style-type: none"> <li>Thorough implementation of a 3R policy—reduce, reuse and recycle—with regard to all the resources relevant to our business activities</li> <li>Improvement in final disposal rate for waste: final disposal rate of 2.5% or lower</li> <li>Strengthen measures at the level of individual organizations based on data on multifunction printer usage. Promote paperless working style that utilizes ICT equipment</li> <li>Amount of paper used per person (office paper, A4 size equivalent): 8,500 sheets (30% reduction compared with fiscal 2010 level)</li> </ul>	Within	Group Companies in Japan	
	Preserving Biodiversity	Facilities that show consideration for biodiversity	We consider that there is the possibility for ICT utilization in promoting biodiversity conservation on a Companywide basis.	Facility construction, maintenance and repair that shows consideration for biodiversity	<ul style="list-style-type: none"> <li>Facility construction, maintenance and repair based on NTT Group building concepts</li> <li>Compliance with action guidelines with regard to biodiversity conservation</li> </ul>	Within	Group Companies in Japan and overseas	
		Contributing to biodiversity by utilization of ICT		Active development and provision of products and services that contribute to conserving biodiversity	Contributions/responses to biodiversity that utilize ICT	Within/outside	Group Companies in Japan and overseas	
	Respect for human resources	Training personnel	Maintenance and improvement of motivation	Toward the Group's sustainable growth, each and every employee is prizing workplaces that can continue to grow through high motivation.	To help maintain and improve motivation among NTT Communications Group employees	<ul style="list-style-type: none"> <li>Implementation of measures designed to assist managers in maintaining and improving employee motivation</li> <li>Expand implementation of employee awareness surveys across the Group, including overseas Group companies</li> </ul>	Within	Group Companies in Japan and overseas
			Building of a career development program		Enhancements in the environment for improving Companywide skills in new business fields	Training time per person 15 hours	Within	Group Companies in Japan
Respect for diversity, equal opportunities and other objectives		Employment and promotion of diverse human resources	Naturally, from the perspectives of the elimination of discrimination in the workplace and the decreasing numbers of the generation in the prime of their lives, we will continue workplace reforms to realize places that will appeal to diverse human resources.	<ul style="list-style-type: none"> <li>Achieve 8.9% as the ratio of women in management positions in fiscal 2020</li> <li>Promote the hiring of more people with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing implementation of measures design to achieve 8.9% as ratio of women in management positions in fiscal 2020</li> <li>Promotion of the hiring of people with disabilities across the NTT Communications Group</li> </ul>	Within	Group Companies in Japan	
		Training of global personnel		In every country/at every level provide flexible, appealing workplaces based on business demands	Implement at level of 70 NTT Communications employees seconded overseas for training, 20 accepted from overseas	Within	Group Companies in Japan and overseas	
Supporting and promoting the health of employees		Respect for work-life balance	At the same time as employees' health and keeping them safe are an employer's basic responsibility, the maintenance of good labor relations remains a universal management issue.	Creation of more satisfying workplaces and improvements in employee work-life balance	The Companywide Work-Life Committee implements a range of measures aimed at decreasing annual total work time and devises ways to improve employee work-life balance. <ul style="list-style-type: none"> <li>Implementation of months for leaving work at regular times (August, November)</li> <li>Implementation of measures toward execution of operations that recognizes finishing times</li> <li>Delivery of internal newsletter with the aim of increasing productivity/stimulating communication, etc.</li> <li>Creation of an environment that facilitates the taking of vacations, "plus one day off" holidays, etc.</li> <li>Reduction of employees working excessive overtime (many employees working overtime, employees who take few annual leave days)</li> </ul>	Within	Group Companies in Japan	
		Thorough implementation of occupational safety and health		<ul style="list-style-type: none"> <li>Maintenance of healthy and comfortable workplace environments</li> </ul>	<ul style="list-style-type: none"> <li>Health checkup rate 100%</li> <li>Implementation of workplace inspections</li> </ul>	Within	Group Companies in Japan	



# Contributions to Society

Amid the ongoing spread of information and communications technology (ICT) as social infrastructure, our businesses fulfill a role in society and are also wide-ranging. Under our Fundamental CSR Policy, we are working on improvements in ICT and on ensuring information security, while providing stable, highly reliable information and telecommunications services worldwide. Furthermore, through the provision of new business models, CSR activities and other means, we are contributing to the creation of a society in which all kinds of people can participate. From fiscal 2011 onward, we have been reflecting all of these in CSR targets (medium-term targets) in CSR Priority Activities "Contributions to Society" and seeking to make ongoing improvements. From fiscal 2016 onward, we will make progress in the further strengthening of initiatives based on new medium-term targets in line with the changing times.

## Activity Achievements in Line with CSR Indexes

With regard to two of the priority activities, namely the development of a ubiquitous network infrastructure and the ensuring of highly stable and reliable mission-critical infrastructure, we were able to "achieve" and "almost achieve" the targets we had set. In contrast, our engagement in social contribution activities was not always adequate and it cannot be said that we achieved our targets, so further improvements in awareness and enforcement activities are necessary at all workplaces. Commencing in fiscal 2015, we have been conducting a re-examination that takes into account social and our own circumstances.

### Fiscal 2015 Activity Achievements

Priority Activity	Measure	Fiscal 2015 Targets		Fiscal 2015 Achievements		
		Qualitative Target(s)	Quantitative Target(s)	Status of Specific Activities	Quantitative Result	Self-Assessments toward Target Achievement
Ensure highly stable and reliable mission-critical infrastructure	Provide Arcstar Universal One	<ul style="list-style-type: none"> <li>Continuing to connect secure, convenient networks</li> <li>We will add functions that will realize global- and cloud-seamless operations as we strive to enhance user-friendliness.</li> </ul>	—	<ul style="list-style-type: none"> <li>Provided global- and cloud-seamless services, implemented significant functional enhancements that contributed to customers' rapid business development</li> <li>Global development of Arcstar Universal One Virtual (May 2015)</li> <li>Commenced provision of Multi-Cloud Connect (August 2015), Arcstar Universal One Flexible Ether (September 2015), Arcstar Universal One Internet Connection Security Option (IWSaaS type) (October 2015) and other services</li> <li>Evaluations following above service provisions</li> <li>For third consecutive year obtained "Leader" ranking in U.S. company Gartner's survey of global network operators in the Asia/Pacific region</li> <li>Named as Leader in U.S. company IDC ITMarketscape's Worldwide Telecom Service Provider Vendor Assessment Report</li> </ul>	Nine functions	★★★
	Provide reliable and secure hosting services	Provide infrastructure services centered on Biz Hosting in order to realize environments in which devices of all kinds can be reliably, securely and easily connected. Strive to further upgrade and extend our range of services in an effort to boost user-friendliness	—	<ul style="list-style-type: none"> <li>Implemented significant functional improvements in Enterprise Cloud. Became first Japanese cloud operator to commence provision of Oracle Database Enterprise Edition RAC (Real Application Clusters) in joint cloud platform (April 2015). Realized cloud services capable of integrated management of ICT environment (March 2016)</li> <li>As a result of our various activities, we received recognition at home and abroad. At Telecom Asia Awards 2015, NTT Communications won Best Cloud-Based Service award for a third time. We also obtained "Leader" ranking in U.S. company Gartner's survey of cloud providers in the Asia/Pacific region.</li> </ul>	—	★★★

# Fiscal 2015 Activity Achievements

Priority Activity	Measure	Fiscal 2015 Targets		Fiscal 2015 Achievements		
		Qualitative Target(s)	Quantitative Target(s)	Status of Specific Activities	Quantitative Result	Self-Assessments toward Target Achievement
Ensured highly stable and reliable mission-critical infrastructure	Provided Biz Mail cloud computing email service to corporate customers	<ul style="list-style-type: none"> <li>Utilize platform in Singapore, expand APAC deployment to Indonesia, Thailand</li> <li>Commence sales to other regions, including the United States, based on operational know-how and cases of introduction overseas, including APAC region</li> </ul>	APAC area: June targets (Indonesia, Thailand)	Added two countries, Indonesia and Thailand, in June 2016. Commenced full-scale deployment in six APAC area countries (Indonesia, Thailand, Singapore, Malaysia, Vietnam, Taiwan)	Realized an approx. 150-fold increase, from two companies and 40 IDs to 139 companies and 5,887 IDs, thereby achieving the year's target of 5,800 IDs	★★★★
	Provided highly stable and reliable data centers	While implementing quality control by means of a unified global standard, work toward disaster-resilient data center operations and plan further developments and expansion	—	<ul style="list-style-type: none"> <li>In addition to newly establishing several data centers, we made data center operators in Germany and Indonesia affiliates and, in addition to devising plans for further global development, introduced more sophisticated levels of service and implemented improvements in quality</li> <li>As a result of our various activities, earned high ratings in third-party evaluations in Japan and overseas, named Data Center Service Provider of the Year for the second consecutive year at the 2015 Frost &amp; Sullivan Asia Pacific ICT Awards</li> </ul>	—	★★★★
	Provided mobile phone personal safety confirmation/notification service	Provide new functions unique to communications carriers, such as improvements in operability of apps and smartphones and communication tool upgrades and expansion service	UI improvements on premise of smartphone and tablet use: December target	In January 2016, implemented improvements designed to improve usability when operating smartphones and tablets (display improvements for menu, personal safety confirmation and information recording screens as well as support for various browsers and PUSH notification function improvements)	Achieved approx. 910,000 IDs (an increase of 93,000 compared with the previous year) by commencing sales collaboration with NTT DOCOMO	★★★★
	Provided reliable and secure OCN services	Constantly strive to expand and enhance services so that all customers, irrespective of age group, can reliably access Internet environment.	—	<ul style="list-style-type: none"> <li>Implemented significant functional enhancements for safe and secure Internet and mobile services</li> <li>Commenced provision of OCN Mobile ONE Count Free Function (July 2015)</li> <li>Extended OCN DDoS-Compatible Services (October 2015)</li> <li>Free provision of Malware Unauthorized Communication Blocking Service (February 2016), etc.</li> <li>Evaluations following above service provisions</li> <li>Gained No. 1 share in MM Research Institute's MVNO market report (OCN mobile ONE)</li> </ul>	12 functions	★★★★
	Developed disaster-resilient networks	Continue to maintain infrastructure facilities that can swiftly restore services to secure continuity of services in line with latest hazard updates and official announcements	—	Prepared additional mobile power source vehicle to reduce the risk of service interruptions from prolonged wide-area blackouts.	—	★★★★
	Measures to address major natural disasters and similar events (zero incidents)	<ul style="list-style-type: none"> <li>Assuming a hypothetical earthquake in Nankai Trough, directly under Tokyo metropolitan area, perform checks of necessary activities for emergency recovery, expand content of charts outlining recovery measures</li> <li>Conduct disaster-response drills for restoration cases and in response to planned electrical outages. Also, augment and establish crisis management processes for liaising with government and municipal bodies.</li> </ul>	Annual drills	On November 5, conducted NTT Com Group disaster drill based on huge hypothetical earthquake with epicenter in Nankai Trough and an earthquake in Uemachi (Osaka area) fault zone	Conducted drills once a year	★★★★
	Implemented network surveillance 24 hours a day, 365 days a year	Constantly monitor customer services (networks, Internet, cloud, mail, hosting, voice services, etc.) to promote global-seamless operations	Reduction in number of long-term malfunctions • Networks in Japan (more than three hours): 122/year • Overseas networks (more than four hours): 400/year • Other (other than network-related malfunctions): 71 cases/year	<ul style="list-style-type: none"> <li>Networks in Japan</li> <li>① Activities for a reduction in number of long-term malfunctions at NTT Com facilities (enhanced directly managed on-site maintenance, unknown system/case development in response to internal failures/establishment of measures, implementation of measures to reduce cable/indoor equipment breakdown time)</li> <li>② Activities to reduce time in-house maintenance personnel spend traveling between arrangements (shorten requests for maintenance personnel arrangement/deciding time, time spent traveling, time outside the company, etc.)</li> <li>Overseas networks</li> <li>① Establishment/implementation of recurrence prevention review processes with Virtela</li> <li>② Trend for overseas carriers to be of longer duration/identification of common factors, review of measures to curb longer durations in collaboration with Virtela</li> <li>③ Continuation of carrier KAIZEN activities in collaboration with Virtela and QM</li> <li>Other (other than network-related malfunctions)</li> <li>Promotion of enhanced monitoring, accelerated failure response, thorough process management and automation of operations</li> </ul>	Number of cases resulting in long-term malfunctions in fiscal 2015 (from April to March) • Networks in Japan: 117 network cases/year • Overseas networks: 520 cases/year • Other (other than network-related malfunctions and more than one hour): 52 cases/year	☆★★
	24-hour, year-round monitoring to ensure reliability and security of corporate information systems (Security Operations Center [SOC])	Enhance and strengthen services that contribute to safe and secure corporate information systems in response to security threats that are becoming more sophisticated and growing in number on a daily basis	Achievement of "disclosure not possible" unauthorized access detection initial report communicated within 15 minutes (more than 99.8%/year)	Enhanced and expanded environments that contribute to safe and secure corporate information systems - Disclosure of Global Threat Intelligence Report - Significant enhancement of communication cutoff function against targeted attacks - Functional enhancements of software-type security appliances - Commenced provision of Endpoint security service - Equipped backbone engine for our management security service with artificial intelligence (AI) - Significantly enhanced protection against and detection of intrusion by unknown malware - Significantly enhanced foundation of AI functions (machine learning) - Commenced provision of "WideAngle management security service IVS"	—	★★★★

Achievement Levels  
 Self-Assessment Set at Four Levels  
 ★★★★★: Target achieved  
 ☆★★★★: Target almost achieved  
 ☆☆☆: Target only partially achieved



# Innovation That Supports a Networked Society

As the pace of ICT and digital technologies quickens, we are also seeing greatly widening opportunities that will enable us to contribute to society through innovative ICT products and services.

The utilization of cloud services is becoming more generalized, from everyday lifestyles to business, and the development of all types of cloud services and the advances being made in data center service networks have become a major thread in the contributions we have made through our businesses over the past few years. With the Internet of Things (IoT) also having rapidly gained attention in recent years, we are actively facing the challenges of developing innovative ICT services to provide secure and convenient everyday lifestyles to people in all walks of society. Having drawn up CSR targets in keeping with these developments, we are seeking to contribute by bringing to fruition innovative products and services.

## Main Achievements in Fiscal 2015 and Goals for the Coming Years

Centered on the CSR Committee, reviews that activities are in line with CSR targets, the verification of achievements, and initiatives toward making further improvements in activities are carried out in conjunction with the department charged with implementing each initiative. In fiscal 2015, achievements were made by bringing to fruition and improving on a range of products and services.

Firstly, in cloud services based on the Arcstar Universal One service brand, we devised enhancements for a variety of menus that enable the benefits of the cloud to be flexibly enjoyed in every business scenario. At the same time, we proposed our Global Cloud Vision to promote a customer shift to the utilization of cloud-based ICT environments and data centers. Promoting the development and expansion of data center networks as service infrastructure to underpin that shift in Japan and overseas, we improved the quality of global-seamless services.

Meanwhile, in the development of ICT services to provide secure and convenient day-to-day lifestyles, we are implementing ongoing service improvements. These improvements include all types of monitoring services of the kind that utilize smartphones to provide personal safety confirmations or enable all customers, irrespective of their age group, to reliably and securely access an Internet environment.

With respect to the activities defined under the CSR targets, results were achieved and self-assessed as "target achieved" or "target almost achieved." In fiscal 2016, we will continue to promote activities set as ongoing targets.

## Providing Services That Help Realize Evolution of Ubiquitous Society

### Business Reform through Promotion of Global Cloud Vision

To define what the NTT Communications Group's Global Cloud Vision means, it is the vision of contributing to customers' management innovations (Digital Transformation) through the optimization of ICT environments by providing seamless ICT solutions.

We provide seamless ICT solutions, globally optimal combinations of various services, such as Cloud, Colocation, Network, Application, Security and Managed ICT, leveraging strengths that are unique to a network service provider.

Our seamless ICT solutions realize: (1) globally integrated and managed ICT environments; (2) low-cost, flexible and on-demand ICT environments; and (3) safe and secure ICT environments for businesses. We support customers' efforts to innovate their business processes, such as the acceleration of decision-making and improvement of productivity, and create new businesses.

### IoT Office Newly Established

In August 2015, NTT Communications established its IoT Office within its Management Planning Department as an organization to respond to wide-ranging customer needs with regard to IoT. By effectively leveraging IoT, the manufacturing sector, where major innovation is expected, will become more diverse, extending from manufacturing to the construction, transportation, nursing, financial and service industries. NTT Communications continues to create systems that make it possible to easily and scalably utilize a variety of IoT services by combining the proprietary secure communication networks that have traditionally been its strength with its range of cloud service products and IoT technologies.

In fiscal 2015, trials were conducted firstly in plant visualizations for the manufacturing industry and then in fields that included the remote monitoring of industrial equipment and the safety management of vehicle operations.

In fiscal 2016, based on the results of these trials, we will offer a variety of applicable lineups as IoT Platform services, including production process monitoring, equipment operational status monitoring and the fleet management of vehicles, for more customers to be able to utilize IoT.

### Providing the Benefits of ICT to All

As ICT gains in importance as social infrastructure, the elimination of the digital divide, which will allow people all over the world to benefit from its use free of any constraints in the areas in which they live, their age and economic standards, is being looked at closely as a challenge confronting the entire human race. While collaborating with Group and partner companies and deploying high-quality communication networks across the globe, we will continue to build systems that provide highly convenient services at reasonable prices and contribute to the elimination of the digital divide.

Overseas in fiscal 2015, we promoted the provision of business infrastructure that would allow people in Asia to enjoy the convenience of ICT through, for example, the expansion of a high-quality communications network in India. At the same time, we encouraged ICT staff community nurturing in each country's labor market, such as accelerating the hiring of local staff for telemarketing businesses in the Asian region.

# Ensuring Stable and Reliable Services as Mission-Critical Infrastructure

Coming hand in hand with the evolution of the ubiquitous society, the economic and social damage arising from factors that interrupt or bring to a halt information communication networks in emergencies remains unquantifiable. As we are entrusted with managing networks and vital data associated with the globalization of many companies, we are in intense demand to maintain networks and in particular for our responsibilities in continuing network connections at all times.

As a corporate group that provides telecommunications services both in Japan and globally by utilizing the network technologies that underpin advanced ICT societies and maintenance systems, we have for some time set “the ensuring of highly stable and reliable mission-critical infrastructure” as a key initiative for the essential CSR area of “contribution to society.” We are making constant efforts in environment improvements that allow confident use of networks even in the event of a disaster or other emergency. Specifically, together with ensuring telecommunications reliability and providing stable services by increasing capacity and enhancing the reliability of our communication routes, through redundant and decentralized equipment and facilities and with year-round, 24-hour monitoring throughout the network, we are promoting initiatives throughout the Group.

## ■ NTT Communications Three Disaster Policy Fundamentals to Address Disasters

### 1. Improvements in networks reliability

We are working to improve reliability so that partial damage to telecommunications systems does not have a great effect on others.

### 2. Maintaining of mission-critical communications

We have secured means of communication to allow important communications in a disaster situation.

### 3. Swift restoring of disrupted communication services

We will restore to service damaged telecommunications equipment as soon as possible.

## Main Achievements in Fiscal 2015 and Goals for the Coming Years

All CSR activities based on the priority activity of “ensuring stable and reliable mission-critical infrastructure” are configured in a variety of ways relating to making information infrastructure more disaster-resilient, including “the development of disaster-resilient networks” and “measures to address major natural disasters and similar events.” In recent years, when the trend has been for natural disasters to occur with increasing frequency both in Japan and overseas, no matter what the issue, we implement reviews and set CSR targets on the basis of internal and external circumstances, while the CSR Promotion Office and the departments charged with being responsible for each activity cooperate with each other.

In fiscal 2015, we devised ongoing improvements in line with each target. Specifically, in the case of making information infrastructure more disaster-resilient, we firstly implemented the multi-routing and the toughening of relay transmission lines as well as disaster preparedness drills that simulated emergency conditions. We were able to record “achieved” or “almost achieved” for each initial target. In fiscal 2016, we will continue to promote activities set as ongoing targets.

## Developing Disaster-Resilient Networks

### Keeping Networks Reliable Following Disasters

NTT Communications has adopted a set of three Disaster Policy Fundamentals to address disasters. Based on these policy fundamentals, we work to maintain mission-critical communications and swiftly restore disrupted communication services. For some time, we have also conducted annual training exercises aimed at allowing a swift response to disasters.

In April 2013, we gathered disaster information on the theme of a Nankai Trough earthquake and planned emergency recovery methods. In October 2014, we conducted a training exercise jointly with NTT Communications Group companies, the exercise relating to restoration measures on the theme of an earthquake striking directly beneath the Tokyo Metropolitan Area. In November 2015, we conducted actual operational training relating to the gathering of disaster information on the themes of a huge Nankai Trough earthquake and an earthquake in the Uemachi (Osaka area) fault zone as well as on the planning for emergency system restoration methods. In reconfirming our tsunami countermeasures, we also conducted actual operational training at the tidal protection gate installation building.

In the Kumamoto Earthquake that struck in April 2016, the main relay cable between Oita and Kumamoto was damaged by the second earthquake, which was of magnitude 7.0. As the scale of disruption from landslides was extensive, the recovery of the same route was beset with difficulties. We locally examined a recovery plan for a new 23-kilometer route that skirted around the former route, and the cable restoration work was completed 12 days after the disaster.

We also conduct annual disaster response exercises for employees and employees of partner companies. The training made use of “Safety Confirmation/Notification,” one of the services offered by NTT Communications. By continuing to conduct regular training exercises that simulate large-scale natural disasters in these ways, we are helping to raise awareness about disasters throughout the Company.

### Providing Services That Underpin Corporate Business Continuity

Offering a range of high-quality services for such crises as major earthquakes and pandemics, NTT Communications supports the continuity 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 felt. Enabling initial damage prevention and ensuring personal 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 personal safety confirmations both verifies and gathers information on the safety of employees during times of natural disaster, including outbreaks of 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 elderly persons, as well as in simultaneously contacting employees who are visiting clients.

We are also expanding services to 14 bases in 11 countries worldwide on Enterprise Cloud, a global cloud service consisting of robust, disaster-resilient data centers for companies that leverage outstanding technological capabilities as telecommunications carriers. This service provides BCP solutions that ensure the timely backup of data at remote locations between Japan and overseas bases.

Cloudn provides an environment that enables flexible changes of resources even during periods of rapidly increasing levels of access at the time of a disaster. This service has a variety of applications, including as a personal safety confirmation system.

# Robust Network Security for Customers

As the adoption of ICT becomes more widespread in society, and at a time when more and more information on companies and individuals is being accumulated on networks, as an ICT business operator we are responsible for ensuring that the valuable information we receive from our customers remains confidential and for securely retaining and managing that information.

To meet society's ever-growing expectations, we continue to enhance our efforts toward robust network security for our customers. While remaining in strict compliance with the set of security regulations maintained and shared by the entire Group, we are advancing the continuous monitoring and operational systems of the ICT systems and networks entrusted to us by our customers more robust and enhancing their vulnerability response functions with regard to unknown threats. We are also planning to enhance our vulnerability response functions to include not only Group companies in Japan but also those overseas. Under these circumstances, in view of the materiality analysis and review of the CSR medium-term targets conducted in fiscal 2016, we are regarding these issues as independent priority activity areas and working to further strengthen our efforts.

## ■ NTT Communications Security Declaration

At NTT Communications, we believe that our most important mission is to provide our customers with services which they can use with the assurance that their critical information is being protected and to contribute to improving the security of our customers.

We view security as the single most important issue to be addressed in providing services, and we pledge to work together with our customer to provide the best in security for their needs.

To achieve this end, we do our utmost to ensure security throughout all aspects of the value chain, from the development of technologies and services to the construction and operation of systems.

As ICT professionals, all of us at NTT Communications are committed improving our capability to ensure security.

## Main Achievements in Fiscal 2015 and Goals for the Coming Years

The basis of CSR activities based on the priority activities consists of all types of measures designed to thoroughly tighten network security, based on "implementing network surveillance 24 hours a day, 365 days a year" while constructing systems to rapidly and reliably respond to threats. Given that, no matter what the issue, the expectations from society grow greater day by day, so we implement reviews and set CSR targets on the basis of internal and external circumstances, while the CSR Promotion Office and the departments charged with being responsible for each activity cooperate with each other.

In fiscal 2015, we devised ongoing improvements in line with each target. Specifically, we reduced long-term malfunctions by improving the monitoring accuracy of services for customers, implemented further strengthening of unauthorized access detection and were able to record "achieved" or "almost achieved" for each initial target. In fiscal 2016, we will continue to promote activities set as ongoing targets.

## 24-Hour, Year-Round Efforts to protect Customers' ICT Systems

### Providing Stable Enterprise System Network Monitoring / Operating Services

NTT Com Solutions has been operating its Management Solutions Center (Sapporo) as an operations center that constantly monitors and stably operates ICT system networks since June 2008. In addition to monitoring and operating customer ICT systems 24 hours a day, 365 days a year, the Center is responsible for customer inquiries, malfunction rectifications, and BCP management support.

In recent years, ICT systems and the operation centers needed for their stable operation have become essential for company business continuity, and high reliability is being demanded from operation centers, as they form the infrastructure that protects customer ICT systems. Characteristically, Sapporo is an area that suffers relatively few lightning strikes or large-scale natural disasters, such as earthquakes and typhoons, and is some distance from Tokyo. Therefore, the operation center itself is unlikely to be affected by any widespread major disasters or pandemics, which would allow the facility to function as a backup for the operation centers in the Tokyo area.

The Center has introduced and firmly established an IT Service Management System (ITSMS). The aim of the system, which is based on ITIL<sup>®\*</sup>, is to enhance service quality, increase value for customers, and boost customer satisfaction levels while improving efficiency and productivity. As a result, the Center acquired ISO 20000 certification, the international standard for ITSMSs, in December 2009.

Being configured to utilize services that include the cloud, customer systems are also undergoing major changes in terms of their technologies and content. The Management Solutions Center (Sapporo) will continue working to enable it to keep pace with these changes and to effectively deliver ongoing operational support services which offer high quality at a low cost as part of its drive to increase customer satisfaction.

\* ITIL<sup>®</sup>: Systematic guidelines covering the operation and management of computer systems formulated by the UK government. The guidelines are compiled in several volumes of books. ITIL<sup>®</sup> (IT Infrastructure Library) is a registered trademark of the Office of Government Commerce (OGC) of the UK government.

## Rapid and Reliable Threat Responses

### Monitoring Enterprise Network Security

With the continued globalization of business activities, we are witnessing growing calls for a uniform global approach toward risk management by the corporate sector. Meanwhile, the dramatic rise in such security risks as cyber attacks, including unauthorized access, computer viruses, and the leakage of data in recent years, has reached a point where the massive losses incurred by companies are threatening their very existence.

Under these circumstances, NTT Communications established the Security Operation Center (SOC) in 2003 and began offering corporate security management services. To that end, we brought a company that specialized in overseas security into the Group. In June 2013, in collaboration with NTT Secure Perspective Laboratories we launched WideAngle, a service which provides comprehensive research and monitoring of security risks as well as providing remedies, and we began offering the service globally. Leveraging a base of security consulting expertise that includes some 8,000 companies, in November 2013 we put together a package that offered this expertise in Japan as well. Also, in May 2014 we significantly increased our detection rate for security threats through the development of an additional operational backbone engine for our management security service. In fiscal 2015, we fortified protection against unknown threats at the endpoint.

Drawing on our extensive expertise in security operations and proven strength in technological development, we work diligently to establish safe and secure information system environments for as many companies as possible, both in Japan and overseas.

# Faithfully Serving Our Customers

Our business covers the full gamut, from the building of global telecommunications networks to the provision of Internet service provider operations. The customers with whom we are in contact through business, ranging from corporations to individuals, are thus likewise varied.

Listening with a finely tuned ear to feedback from such a varied customer base, while developing and enhancing the mechanisms to flexibly utilize that feedback, represent challenges that are becoming essential for us to continue to grow as a leading global ICT company in partnership with society. Taking this stance, we are committed to taking customer satisfaction (CS) surveys on a regular basis and proactively utilizing points of contact with our customers.

The CSR Promotion Department and the divisions in each business cooperate while implementing these initiatives.

## Ongoing Customer Satisfaction Surveys

### Efforts That Utilize Feedback from Customers at Affiliates

In aiming to remain the service provider of choice for customers around the world, it is not only those responsible for sales who contact customers on a daily basis. All employees are as one in regarding customer contact as a priority and make every effort to improve customer satisfaction by providing innovative services and through daily improvement activities.

One of the initiatives we implement is an annual VOC (Voice of the Customer) survey on customer satisfaction. The variety of feedback we receive is taken seriously and earnestly added to our improvement activities.

The majority of feedback from corporate customers is in the form of requests relating to quality and reliability. Requests such as these—involving network quality, cloud reliability, security initiatives and the like—are essential to our business. There has also been an increasing demand for applications that help companies change the way their employees work. Some of the comments we receive pose challenges to us, such as asking us to ensure seamless domestic and overseas operations or enable integrated management with other companies' services. Responding to such requests is one of our everyday tasks.

We disclose our efforts with regard to such feedback on our website.

Looking ahead, we will continue to pay close attention to feedback from our customers as we strive to make permanent improvements that will increase customer satisfaction.

## Initiatives That Utilize Feedback from Individual Customers

### Operation of OCN Technical Support for Individual Customers

Under the OCN provider service, we set up OCN Technical Support as a point of contact for receiving questions from and for giving advice to individual OCN members as well as for undertaking various kinds of support work.

In order for our customers to use ICT services securely and comfortably, we place great importance on detailed customer support preparations. On that basis, we have assigned contact center and home visit staff and respond to inquiries on a daily basis. We are also focusing on operator training and are continuing our efforts toward the realization of high-quality support, such as by making both Web-based and practical training mandatory.

### Sharing through Dedicated OCN Customer Feedback Website

With the aim of further improving the quality of the OCN service, we set up a dedicated OCN Customer Feedback website and are working on service improvements.

We receive numerous comments and requests from customers concerning OCN services. On our website, we provide case studies of improvements based on this feedback.

Feedback sometimes takes the form of either praise or complaints, and this type of interaction is very important to our everyday efforts to enhance service quality.

We will naturally continue to reflect OCN Customer Feedback with improvements in our services, incorporating enhancements leading to more convenient Internet access for our customers.



# Our Relationship with Suppliers

In recent years, there have been calls for companies to implement CSR activities along entire supply chains. Those demands have naturally necessitated not only Groupwide CSR activities but also the building of honest, sustainable relationships with suppliers. Accordingly, as part of the responsibilities of a global ICT company, we have established Supply Chain CSR Promotion Guidelines and are focusing on the development of mutual understanding and relationships of trust with our suppliers as well as on the promotion of CSR and green procurement.

Maintaining a focus on value creation through business, we have a particular need to procure high-quality services and products in an economical and timely manner. On the basis of its three-point policy on procurement listed below, NTT Communications therefore engages in fair and competitive procurement activities within the global market, conducting its procurement activities from the perspective of the broad global marketplace and in an effort to make Group management more competitive.

## Summary of Supply Chain CSR Promotion Guidelines

<b>Human Rights, Labor</b>	<ul style="list-style-type: none"> <li>Prohibition of forced labor and child labor</li> <li>Respect for the right to organize and conduct collective bargaining</li> </ul>	<b>Fair Trade</b>	<ul style="list-style-type: none"> <li>Prevention of corruption and bribery</li> <li>Respect for intellectual property rights</li> </ul>
<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>Factory safety measures</li> <li>Measures targeting occupational injury and illnesses</li> </ul>	<b>Quality and Safety</b>	<ul style="list-style-type: none"> <li>Ensuring product safety</li> <li>Creation of a quality management system</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Management of hazardous chemicals</li> <li>Effective use of resources and energy</li> </ul>	<b>Information Security</b>	<ul style="list-style-type: none"> <li>Prohibition of leaks of personal information</li> <li>Information system protection measures</li> </ul>

## Basic Policy on Procurement

1. NTT Communications will strive to provide competitive opportunities with fairness to both domestic and foreign suppliers, and to build mutual trust and understanding.
2. NTT Communications will conduct economically rational procurement of competitive goods and services that meet its business needs, deciding suppliers based on quality, price, delivery times and stable supply in a comprehensive manner.
3. NTT Communications will conduct procurement in a manner that follows laws and regulations as well as social norms, and takes the environment, human rights and other issues into account to contribute to society.

## Strengthening Relationships with Our Partners

### Development of ACF Partner Forum Designed to Enhance Ongoing Collaboration

The Arcstar Carrier Forum (ACF) is an international conference we have sponsored since 2000 that invites partner carriers from around the world to Japan for the purpose of improving quality in the operation and delivery of international network services. Held on a regular basis every year, the focus at the ACF has been on expanding discussions of initiatives aimed at improving the quality of essential infrastructure, such as ways to deal with malfunctions and construction issues, infrastructure design and construction processes to prevent issues from arising, and operational support systems that enable rapid issue analyses and resolutions.

Bearing the slogan "Go beyond~True Collaboration~," the fiscal 2016 ACF, the 13th, was held in Tokyo in June. In order to improve quality in terms of global network service layout, formulation, operation and maintenance and to improve customer satisfaction, network service providers together confirmed the added importance of exceeding customer expectations by reviewing technologies and processes that may not have recently been subject to review and by transcending organizational barriers. Participants held discussions on what steps to take to meet those expectations.

Through initiatives such as the ACF, we will improve operations and quality in international network services, while also building extensive operational know-how.

## Arcstar Carrier Forum



## CSR and Green Procurement

### Promoting CSR Procurement

We have formulated supply chain CSR promotion guidelines that encourage procurement policies that respect human rights and protect the environment, ensure the quality and safety of products and services, and recognize the overall needs of society.

Based on the above guidelines, which were formulated in December 2013, we have asked our principal suppliers for their cooperation in completing questionnaires on the status of their initiatives with the aim of promoting CSR activities.

In fiscal 2015, 11 companies were asked to complete questionnaires.

## Response to Conflict Minerals

NTT Communications and NTT Communications Group companies will conduct procurement activities in accordance with the NTT Group's Response to Conflict Minerals.

# Social Contribution and Fostering of Communities

NTT Communications encourages engagement in social contribution activities in a number of fields. We intend to continue contributing to the realization of an affluent society through activities that cover a wide range of fields that include: international cooperation; environmental conservation; health, medical and welfare fields; and regional development. In addition, at a time when efforts toward recovery are under way in the regions affected in the aftermath of the Great East Japan Earthquake, we are continuing our support efforts to reconnect the social bonds in those regions and do all we can to be of assistance in rebuilding lives there.

In recent years, it has become expected for social contribution activities to play a role in supporting the development of diverse communities that encompass the locality and the different generations. Maintaining an awareness of community in our activities, we will expand the scope of the people at which those activities are aimed.

## ■ Social Action Principles

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

## Serving Local and International Communities

### Cleanup Activities

NTT Communications has participated in cleanup campaigns in Tokyo's Chiyoda Ward since 2008. On June 9 and November 5, 2015, 277 and 251 people, respectively, conducted cleanup activities around Hibiya Park.

In addition, players from the Shining Arcs rugby team conduct cleanup activities in the area every month.

### Providing Nationwide Employment Opportunities for Women at Home

Including technical support for Internet connection service (OCN) members, we are developing business centered on technical support, such as telephone support (help lines, call centers), home visit support and the integrated management of corporate ICT equipment. For these projects, we are actively providing opportunities for women resident in Japan to work from home.

Specifically, in the case of telephone and home visit support, staff working from home are active all over Japan, from Hokkaido in the north to Okinawa in the south. By tapping into the potential workforce—such as those who have given up work to bring up children, to provide nursing care or due to work-related family relocations; those who live in rural areas, where there are few jobs suited to their situation within easy commuting distance; and retired seniors—we are engaged in getting women to play a more active role, in revitalizing communities and in providing new job opportunities.

In the years to come, we would like to continue to provide opportunities for individuals who want to work without location or time constraints, thereby enabling them to utilize their abilities, and contribute to the realization of a society in which more people are able to an active part.

## Environmental Contribution Activities at Group Companies in Japan

For some time, we have been advocating that each Group company independently perform its own social contribution activities. As a result, gatherings of employee volunteers that perform environmental conservation activities, including natural woodland preservation, have formed at each company and are continuing their enterprising activities. The main activities are listed below. As a corporate citizen, we will continue to encourage the conducting of low-profile though meaningful activities that help local communities.

### ■ Examples of Environmental Contribution Activities at Group Companies in Fiscal 2015

Company Name	Measure	Outlines	Implementation Period	Number of Participants
NTT Com Marketing	Cleanup of area around our building	Cleanup of area around Saiwai Building	June, November 2015	80
	NTT West Clean Strategy	Cleanup activities in Mineyama Park (Mineyama-cho, Takamatsu City)	May 2015	3
	Kyushu Clean Strategy	Cleanup activities in vicinity of Katsuyama Park, Kokurakita-ku, Kitakyushu City; cleaning of Shikanoshima Seawater Baths, Fukuoka City	June 2015	8
	Natural woodland cleanup activities in Shiroi	Environmental preservation activities in natural woodland in Hiratsuka district of Shiroi City, Chiba Prefecture	May, August, October 2015	49
NTT Plala	Cleanup of area around our building	Cleanup of area around buildings in Tokyo (Ikebukuro, Ariake)	June 2015 (twice) September 2015 February 2016 March 2016	82
NTT BizLink	Cleanup of area around our building	Cleanup of area around Sumitomo Fudosan Korakuen Building	January, February, March 2015	7

### Local Support for ICT Adoption through Overseas Businesses

In Asia's emerging countries, where there is both acceleration of economic growth and a rising wave of society's adoption of ICT, there are urgent needs for information communication upgrades and human resource development. While ICT is in the process of becoming a cornerstone of corporate activities in each country, we launched a telemarketing business in January 2016, hired and trained local operators, and are proposing and helping to install state-of-the-art ICT solutions, including cloud technologies and data centers, matched to the diverse needs of companies in the Asian region. Through our overseas businesses, we will accelerate the building of lasting relationships, from the aspects of the knowledge we have gained as an ICT company and of job creation, in the years to come.

## Activities Performed by Corporate Rugby Team

### Youth Development

NTT Communication's rugby team, the Shining Arcs, holds tag rugby—a combination of a game of tag and rugby—classes in conjunction with bodies such as the Ichikawa City Board of Education with the goal of helping children live healthier lives and interact more closely with their communities through sports. In addition, as there are currently no competitions with rankings, such as a rugby tournament for elementary school pupils, a 16-team tournament was held for local rugby schools in Chiba Prefecture and Tokyo. The aim of the tournament, the Second Shining Arcs Cup, was to improve children's ambitions and their level of competitive spirit as well as the level of the competition.

Through this kind of activity, we naturally hope to contribute to the healthy development of the young people who will be responsible for the next generation but also to the development of rugby as sports culture and to further expanding the numbers and raising the level of those playing competitive rugby.

#### ■ The Second Shining Arcs Cup



### Initiatives Supporting Recovery from the Great East Japan Earthquake

For the people affected by the Great East Japan Earthquake of March 11, 2011, NTT Communications wondered whether a lasting fading of memories could be brought about through rugby. By collecting donations from all the Shining Arcs players and staff at games depending on the points scored (10 yen per point), we supported recovery in the disaster-affected regions through rugby. In the most recent 2015–2016 season, we held the "Top League All-Star For All Charity Match 2016 Supported by Valor Group" in Aichi Prefecture, from which we donated event revenue, including the proceeds from admission fee income and a charity auction. Put to use by the "Iwate Learning Hope Fund," the "East Japan Earthquake Recovery and Scholarship Fund" in Miyagi Prefecture and the "East Japan Earthquake Donations for Children" in Fukushima Prefecture, the three million yen in revenue generated by the event largely went to help support children affected by the Great East Japan Earthquake.

Having extended the Shining Arcs activity to all the TOP League teams, we were able to greatly expand its scale.

#### ■ Japan Rugby TOP League Fundraising Featuring Shining Arcs

	Participating Team(s)	Money donated	Use of funds raised
2011–2012 Season	NTT Com only	366,525 yen	Donated to Japanese Red Cross Society
2012–2013 Season	NTT Com only	404,800 yen	Donated to Miyagi Rugby Football Union
2013–2014 Season	All TOP League teams	Approx. 2 million yen	Invited children from disaster-affected regions to a Japanese national rugby team game held in June 2014
2014–2015 Season	All TOP League teams	2,306,040 yen	<ul style="list-style-type: none"> <li>• Holding of charity event for children from city of Kamaishi, Iwate Prefecture (October 24, 2015)</li> <li>• Children from Kamaishi invited to LIXIL CUP 2016 rugby game</li> </ul>
2015–2016 Season	All TOP League teams	2,270,170 yen	Not yet decided

## Participation in External Groups

Toward the creation of a better society, companies are expected to be actively involved in progressive initiatives for the public and private sectors and in industry-wide initiatives. We collaborate with a variety of organizations and address the measures that will lead the industry.

### Assisting in Internet Crime Prevention

#### Efforts to Safeguard Internet Users' Safety and Security

Breaches of security caused by malware are steadily on the increase. Taking as an example unauthorized Internet banking remittances, which is one of the cyber crimes for which malware is used, National Police Agency investigations estimate that the figure for this type of crime in Japan reached roughly ¥1.5 billion in the first half of 2015, the worst financial damages on record. The avoiding of financial losses by such unauthorized communications requires users to take security measures individually; however, a lot of systems behave in such a way that malware remains unnoticed even when a system is infected, so spreading countermeasures is no simple matter. In response, NTT Communications is proactively addressing the creation of systems that will make using the Internet safer and more secure, such as being the first Japanese ISP to provide an anti-malware service that customers can use free of charge without having to make an application or setting up the system,

In addition, NTT Communications participates in the Advanced Cyber Threats response Initiative (ACTIVE), a support project designed to thwart damage from cyberattacks that target the vulnerabilities of Internet users' terminals. The project was launched in November 2013 by Japan's Ministry of Internal Affairs and Communications to realize a safe and secure Internet environment for citizens through a public-private collaboration. As specific measures to prevent malware infection, in addition to the list of malicious sites used by NTT Communications in its Malware Unauthorized Communication Blocking Service, the project increases the judgment accuracy of its malicious site list by sharing and utilizing an ACTIVE-compiled list, prevents the spread of customer malware infections, calls attention to infections and makes efforts to eradicate malware infections.

Following the announcement of the implementation of a strategy to neutralize Internet banking viruses by the Tokyo Metropolitan Police Department (TMPD) on April 10, 2015, there was a request from the Ministry for Internal Affairs and Communications for cooperation in conducting a campaign, using ACTIVE, to draw public attention to people whose computers had been infected with malware. Cooperating on the strategy, NTT Communications implemented proactive alerts and individual contacts based on malware infection information provided by the TMPD. These efforts having been highly commended, and OCN was presented with a letter of appreciation from the TMPD. In the years to come, we will promote measures against malicious sites and assist in keeping Internet crime in check.

### Industrywide Efforts toward Child Pornography Countermeasures

The blocking of child pornography on the Internet is an important issue that must be addressed, naturally in order to protect the human rights of children and to prevent children's participation in human rights abuses and ensure the provision of a safe Internet environment. Taking in particular the opportunity presented by the Japanese government's release of its policy on a national campaign against child pornography in 2010, the setting up of an active system—including the voluntary blocking of access to child pornography websites by Internet service providers (ISPs)—is continuing with support from the public and private sectors. In 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 to share information on the websites they will block to prevent access to child pornography images by providing other member providers with child pornography website address lists.

Specifically, the NTT Communications Group's "goo," "plala," and "OCN" services have access restrictions based on child pornography website address lists provided by the ICSA. In line with the child pornography website address lists provided by the ICSA, steps were also taken to block child pornographic images by each of the ISP providers in 2011, and NTT Resonant is responding by modifying the various search services that it operates.

→ For more information about the NTT Communications Group's initiatives toward respect for human rights, please see Continuous Strengthening of Management and Governance section.





People

# Respect for Human Resources

In accordance with its Fundamental CSR Policy, the NTT Communications Group respects employee diversity and works to create workplace environments that champion self-fulfillment.

Realizing “workplaces with high professional awareness” and “fair workplaces in which personnel maintain a mutual respect for diversity” naturally requires education on the independence of mind for employees and the building of the mechanisms to make that possible. Based on these ideas, we have positioned the Groupwide initiatives to be addressed as core measures and are promoting ongoing improvements. These include the fair treatment of personnel and the development of training systems, the creation of workplaces where diversity is respected, and the upgrading of measures designed to maintain and enhance the health of employees.

In view of the trend toward borderless economies in recent years, we are following our customers’ lead and continuing to conduct business globally in a seamless manner. As an ITC professional capable of providing services around the world, we fulfill our social responsibilities by maintaining high ethical standards in our corporate activities.

## Personnel Data

### ■ Total Number of Employees and Breakdown of New Employee Numbers by Gender

		Fiscal 2011	Fiscal 2012	Fiscal 2013	Fiscal 2014	Fiscal 2015
Number of employees		8,000	6,850	6,850	6,500	6,450
	Male	7,000	5,900	5,900	5,550	5,500
	Female	1,000	950	950	950	950
New employees (of which non-Japanese nationals)		226 (14)	212 (36)	223 (29)	219 (36)	195 (22)
	Male	160 (8)	148 (23)	167 (18)	149 (19)	148 (8)
	Female	66 (6)	64 (13)	56 (11)	70 (17)	47 (14)

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

## Activity Achievements in Line with CSR Indexes

In fiscal 2015, we implemented a wide range of activities on the basis of “respect for diversity and taking steps to promote equal opportunity and other objectives,” a priority activity. Firstly, with regard to the building of workplace systems that allow diverse personnel to work with vitality, we consider initiatives that we term Perspectives as a responsibility that companies should fulfill for their employees. In keeping with this belief, we engaged in a number of themes and have steadily achieved results in each. The themes included the promotion of working style reform, support for balancing child raising/nursing care and careers, and improving the statutory ratio for the employment of people with disabilities.

In actively utilizing the diversity of our personnel, we are also building systems to enable companies and their employees to grow together. As these moves are indispensable for a global ICT corporate group that continues to provide value to society, we are accelerating the pace of Groupwide initiatives in the promotion of global human resource exchanges and the placing of women in management positions.

In fiscal 2016, we will continue to encourage the kinds of core initiatives outlined above and ensure that diversity remains respected, while fostering the spread of activities to corporate groups that are enlivened by their personnel and to all workplaces, be they in Japan or overseas.

### Fiscal 2015 Activity Achievements

Priority Activity	Measures	Fiscal 2015 Targets		Fiscal 2015 Achievements		
		Qualitative Target(s)	Quantitative Target(s)	Status of Specific Activities	Quantitative Result(s)	Self-Assessments
Respect diversity and take steps to promote equal opportunity and other objectives	Promotion of diverse working styles by extending working style reforms across the Company	<ul style="list-style-type: none"> <li>Thorough implementation of workplace action plans, improvements in productivity across the Company</li> <li>Ongoing promotion of process improvement efforts</li> <li>Improved assessment of workplace productivity in all-employee survey</li> </ul>	—	<ul style="list-style-type: none"> <li>By utilizing WORK-LIFE newsletters, etc., horizontal development of work-life action plans, outlining of high-quality action plans</li> <li>Promoted taking life plan (child care) leave with the aim of having men take vacations for childcare purposes</li> <li>Held sessions on new workstyles in presentations that gave case study examples of improvements and made content known within Company·Outlining of examples of other companies' superior workstyles (cases of overtime reduction)</li> </ul>	<ul style="list-style-type: none"> <li>In Companywide employee questionnaire, workplace productivity assessment edged down by 0.08, from 3.17 to 3.09 (out of maximum score of 5.0)</li> <li>The number of male employees taking vacations for childcare purposes achieved a 45-fold increase compared with previous year (14→640 men)</li> </ul>	☆☆☆
	Enhancement of support for balancing child raising/nursing care responsibilities and careers	Implement support measures to enable both men and women to continue engaging in lively work and career paths while balancing work with child raising/nursing care	—	<ul style="list-style-type: none"> <li>Conducted seminar on supporting balance between work and child raising for employees returning from child raising leave (May) and life event (pre-natal) consultations (March)</li> <li>Increased the number of short training session menus in which even people working shorter hours can easily participate</li> <li>Due to career continuation program (day care center support) two people returned to work after childcare leave</li> </ul>	—	☆☆☆
	Improvement of statutory ratio of employees with disabilities	To maintain statutory employment rate of 2.0%, implement ongoing recruitment activities throughout NTT Communications Group	Achievement of statutory employment rate of 2.0%	To maintain statutory employment rate of 2.0%, continuing to implement recruitment activities throughout NTT Communications Group	Statutory employment rates (As of March 1) <ul style="list-style-type: none"> <li>NTT Communications, non-consolidated: 2.09%</li> <li>NTT Communications Group: 2.01%</li> </ul>	☆☆☆
	Expansion of personnel exchanges on a global scale	In both overseas secondments and the hosting of overseas employees, concentrate on more effective personnel interaction by enhancing follow-up during course of programs	Implement personnel exchanges on same scale as previous year. (74 people seconded overseas, 24 people hosted from overseas)	From July 2015, seconded overseas trainees from NTT Communications in sequence to overseas Group companies. Also implemented associated hosting of personnel from overseas Group companies	Personnel seconded overseas by NTT Communications: totaled 50. Personnel from overseas companies hosted: 24	☆☆☆
	Improvement of ratio of women in management positions	Continue mentoring and seminar activities by female managers, further promotion of improvements in employee career-mindedness	—	<ul style="list-style-type: none"> <li>Twice held discussions with women in management positions (September, December), attended by 85 female employees</li> <li>In February, held discussions between women in management positions for newly joined employees, attended by 25 people</li> <li>Conducted Next-Generation Leader Program for Women (September to February), total of 36 employees participated. Individual mentoring offered as part of program</li> </ul>	In all-employee questionnaire results, career-mindedness of female employees remained at same level as previous year	☆☆☆

Achievement Levels  
Self-Assessment Set at Four Levels  
☆☆☆☆: Target achieved  
☆☆☆☆: Target almost achieved  
☆☆☆☆: Target only partially achieved

# Human Resource Development

Aiming to remain a company where employees can demonstrate on-site capabilities while playing an active role in business operations, the NTT Communications Group has a Professional Human Resource Development Program in place as the main pillar of its human resource development policy and encourages the running of the program on a Groupwide basis. Under the program, we first define the ideal employees and visualize their desired skills. We then assess individual skills and identify current gaps. Finally, we consider how to effectively assign job duties to close any skill gaps and devise continuous improvement through a human resource development cycle by which we review training measures. The implementation rate for our Professional Human Resource Development Program reached virtually 100% in fiscal 2010 and remains steady. We believe that we have gained a significant level of results in raising employee skills and promoting them to higher ranks.

In aiming to bolster corporate competitiveness through accelerated globalization, we are currently promoting measures that place an emphasis on the "cultivation of global human resources." While continuing with our thinking that practical experience is the most effective, we will work on human resource development that in particular helps strengthen specialist expertise with a view to cultivating human resources in line with our medium-term growth strategies, such as our Global Cloud Vision.

## Main Achievements in Fiscal 2015 and Goals for the Coming Years

We have also expanded opportunities to enhance specialized skills, based on the career development plan (CDP) that is in line with professional human resource training programs. Specifically, while conducting annual skill level checks of all employees, we encourage people to acquire public certifications and offer an extensive range of training menus for employees to choose from, their choices forming the basis for training.

As of April 2016, NTT Communications has offered 785 skills enhancement courses, 187 skills enhancement support courses (such as distance learning) and 101 personal development support courses. In the years to come, in light of business globalization, we plan to carry out further improvements in the career development menus.

## Systems for Human Resource Development and Evaluation

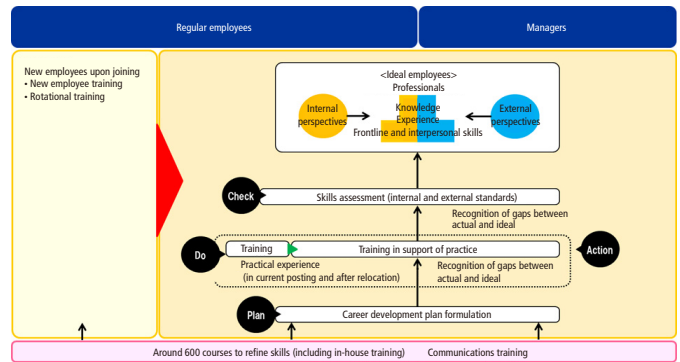
### Education/Training Systems

We provide a range of training programs designed to improve employees' skills and to encourage the following of appropriate career paths.

For new employees, we provide on-the-job training (OJT) that gives them experience in several departments primarily at frontline points of contact with customers. In this way, they cultivate customer-oriented mindsets, and we encourage them to gain an understanding of the value and importance of always carrying out tasks from a customer perspective.

While formulating their career development plans (CDPs) and gaining real on-site experience, all employees select and decide on training courses after consultation with their superiors. With regard to the training menus, we review more practical and appropriate training content and take into consideration the results of employee surveys, while constantly devising structured training programs.

## System of Human Resource Development Measures



## Professional Human Resource Development Program

Given the changes in the operating environment and customer needs—including the growing diversity, sophistication, and complexity of customer needs, the increased pace of transition to new business and consumption models as well as globalization—NTT Communications is enhancing its frontline professional human resource development to make them capable of being active and accepted on the world stage.

Specifically, we have classified our professional human resources into nine specialized categories. For each, we have identified necessary skill levels from both internal and external perspectives, including applied expertise, experience, skills, ability to communicate with employees on-site, and specialization. In this manner, we support the development of professional skills for each employee in every area of specialization. We flexibly revise these specialist categories and skills standards on an ongoing basis, taking into account changes in the market and evolving operational strategies.

## Nine Ideal Employees

[Main Categories]	[Subcategories]	
Units monitoring employee's CDP	Units ascertaining employee skills	
① Sales	• Corporate sales	• Partner sales
② Service planning/Marketing	• Colocation • Networks • Cloud	• Applications • Voice • Security • Managed ICT
③ Operational planning	• Charges	• SO/Delivery • Maintenance
④ Engineering	• Software development • Applications • IP networks • Servers & storage	• Data centers • Infrastructure networks • Voice • Security
⑤ Service management/Project management		
⑥ ICT consulting		
⑦ Finance		
⑧ Legal affairs		
⑨ Staff	• Management strategies • Business planning	• Labor and welfare • Personnel • Publicity • General affairs

### Extension of Young Employee Development Program

Implementing an overseas secondment program with the aim of cultivating the human resources capable of excelling on the world stage, NTT Communications expanded those eligible to include young employees in fiscal 2011. Under this program, employees are sent overseas for one year to undergo OJT, acquiring global communications skills through first-hand experience. In fiscal 2015, we sent 50 employees overseas through this program.

### Internal Job Posting System

We use an internal job posting system that provides motivated employees with challenging opportunities to maximize their potential in a wide range of fields. The system is being used extensively by employees of all ages, with job postings conducted within the NTT Communications Group and the NTT Group.

The job postings conducted in fiscal 2015 focused on bolstering the human resources in the following areas:

- Global business
- Cloud-related services
- Security-related services
- Upper layer-type services
- Human resources capable of bolstering Group companies toward the maximization of total Group power

In fiscal 2015, approximately 40 employees were assigned to departments of their choice within the NTT Communications Group and the NTT Group. Looking ahead, we will continue to actively use the internal job posting 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.

### Personnel Evaluations

NTT Communications aims to improve its employees' desire to confront challenges and motivate them to perform to the best of their abilities. While as ever emphasizing fairness and transparency in this regard, we worked on revisions to our personnel and remuneration systems to put greater emphasis on results and performance.

Accurately assessing employees' performance against their goals is a crucial aspect of this system. Under this system, we recognize the importance of employees who act with an increased sense of speed and are prepared to boldly address change, without the fear of failure, while positioning the needs of customers as their first priority. At the same time, we are cognizant of the need to accurately grasp and evaluate the results of efforts to overcome certain challenges and reach specific results. In this context, we encourage employees to reflect on their voluntarily set goals and endeavor to operate a highly convincing, appropriate system, for example by providing them with the opportunity to participate in performance review meetings with their supervisors at least twice a year.

## Maintaining and Improving Motivation

### Ongoing Employee Satisfaction Surveys

Having conducted employee satisfaction surveys since fiscal 2011, we aim to improve employee job satisfaction and productivity by setting agendas and implementing measures in light of the survey results. Since fiscal 2014, we have been working to further improve employee job satisfaction by objectively pinpointing NTT Communications' strengths and weaknesses. To serve as benchmarks indicating job satisfaction we have thus newly adopted the Great Place To Work\* numerical indexes that are used in research and analyses relating to job satisfaction.

\* Conducting research and analyses relating to job satisfaction, Great Place to Work\* is a specialized agency active in more than 40 countries that implements activities, announced in the leading media, covering the companies and organizations that are recognized as having attained a certain level.

Outline of Survey
<ul style="list-style-type: none"> <li>• Period conducted: January to February 2016</li> <li>• Survey targets: NTT Communications Group employees/contract workers, etc., in Japan</li> <li>• Number of respondents: 12,527</li> </ul>
Future Measures
<ul style="list-style-type: none"> <li>• Implementation of measures geared toward managers</li> <li>• Provide opportunities for communication between senior management and employees</li> <li>• Deploy measures to elicit communication</li> <li>• In addition to continuing the existing no-overtime months, etc., promote working style reform</li> </ul>

### Incorporating Employee Feedback

We emphasize communications with employees to build a corporate culture in which employees are motivated and from which they can derive pleasure. Our goal is to create open environments where the ideas of our employees are rapidly reflected in our management and business processes by having employees feel that they are free to send proposals directly to us.

As part of that commitment, we launched the KAIZEN (Continuous Improvement) initiative (now the Digital KAIZEN Design Office) in July 2006. We also instituted a Direct Line program to deal with constructive proposals from employees beyond organizational and supervisory boundaries. In May 2011, we made it easier to submit proposals through a change in the submission format that now requires only the identification of a problem within a business process, without necessarily requiring an improvement plan. We also changed the name to KAIZEN Support Line.

The proposals and the status of related 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 have seen a number of increases in process efficiency as a result of this initiative.

We had received around 1,034 proposals through June 30, 2016. 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.

## Dream Idea Contest

As an initiative aimed at expanding the horizons and opening up the future of the NTT Communications Group, we are calling for the submission of new ideas in a wide range of areas and implementing measures that will contribute to the development of services. This initiative is 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. During the six calls for submissions made to date, we have received more than 1,500 submissions, of which six have been adopted and turned into actual services. Applications are 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 those uninitiated in the use of 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 to submit ideas.

As we work to become a company where dreams can come true, we will continue to implement measures that help create vibrant and comfortable workplaces.

### ■ Dream Idea Contest poster



## Labor-Management Relations

NTT Communications maintains a policy of labor-management equality. Based on this, we prioritize dialog that emphasizes labor-management relations characterized by independence and responsibility. In addition to employment and working conditions, we seek to foster mutual understanding of issues related to operations management.

## Respect for Diversity, Equal Opportunities and Other Objectives

The NTT Communications Group works to create workplaces that allow personnel with diverse backgrounds to work to the best of their ability, regardless of their gender, age, birthplace, nationality, or whether they are people with disabilities. Having established the Diversity Promotion Office in April 2008 to utilize the diversity of its human resources and achieve targets stated in management strategies, we implement activities that center on working style reform, including meeting reforms, and the securing of diversity. The aims here are to support the career development of women, promote the hiring of people with disabilities, develop environments that utilize ICT, and improve productivity. Our business activities having undergone globalization in recent years, we are also advancing diversity in terms of nationality. In response, we have been working to expand the reach of global human resource management (GHRM) measures centered on our human resource departments since 2010.

Diversity promotion is thus positioned as being essential for the sustainable development of business by the creation of new value that leverages diversity, and messages from senior management are transmitted and disseminated both inside and outside the Group.

### ■ Promotion of Diversity Fundamental Policy

- Foster a corporate culture that leverages employee diversity to achieve targets stated in management strategies
- Continue to create environments that enable employees to show their full potential to produce human resources who further their own transformation and creativity

## Main Fiscal 2015 Initiatives and Goals for the Coming Years

Continuing with its efforts to boost the ratio of female employees in management positions with every passing year and aiming to increase the number of women who excel on the frontline, the Company made developing the careers of female employees and raising awareness of opportunities one of its priorities in fiscal 2015. The proactive steps we took included the promotion of mentoring programs among female employees in management positions and the running of training programs geared toward female administrator candidate employees.

Faced with a veteran tier of employees that will be becoming increasingly top-heavy over the next few years, the Company is anticipating other ways of working following retirement age rehiring, based on the recognition of the need in the years ahead to face up to reforms of existing businesses and to the challenge of new growth fields. We have been backing efforts to build tailor-made careers for employees in their 50s that will enable veterans to improve their willingness to take up challenges, display ongoing high levels of performance, and enable them to continue working with motivation.

Carrying on from fiscal 2011, we continued to advance working style reform. In specific terms, we put in place a smart device environment to realize working styles that help increase the efficiency and autonomy of work as well as productivity regardless of time and place. Making full use of this environment, we initiated efforts aimed at engaging in working styles that place a premium on efficiency while promoting paperless meetings. In order to enhance productivity, we hope to introduce ways of better balancing the work and home lives of employees who are talented people. Accordingly, we will continue to implement this project in an effort to foster a corporate culture that places the utmost emphasis on employee health and the opportunity to further improve skills and capabilities. In addition, with regard to encouraging the diversification of our global human resources, we are continuing to hire students from overseas and conducting human resource exchanges and other programs with overseas Group companies.

### Diversity Promotion

To meet the needs of its diversifying customers, NTT Communications Group members who have varied personalities and backgrounds respect each other as they trade a range of values and thoroughly display the capabilities that each company possesses. Promoting the creation of environments that give rise to new ideas and businesses, the Group is steadily addressing diversity.

In fiscal 2015, the improvements made to our services and processes—including the standardization of service operations across the globe and the introduction of a companywide workflow management system to enable the sharing of business processes—as well as our multifaceted initiatives received official recognition. In March 2016, NTT Communications was selected by the Ministry of Economy, Trade and Industry to receive the New Diversity Management Selection 100 award given by the Minister of Economy, Trade and Industry to companies that have improved corporate value through diversity management.

### Promoting Women’s Participation and Advancement

NTT Communications provides career development support at various stages as part of its effort to increase opportunities for diverse human resources to engage in work in a lively and vibrant manner. In fiscal 2015, we continued to channel our energies into helping our female employees develop their careers and undertook the two key initiatives that follow.

- (1) Career formulation through Next-Generation Leader Program for Women, for employees wishing to be considered as administrator-level candidates, and through skills training necessary for leaders and the formulation of career development plans
- (2) Establishment of a forum that allows female employees to speak directly to female managers, take stock of their careers and better visualize their futures

In addition to assessments with regard to working style reform and other initiatives, the abovementioned encouragement for the development of women’s careers was awarded the basic achievement standard grand prize at the Diversity Awards (Corporate Prize, Basic Category) held by the Japan Innovative Women’s Network (J-Win) in March 2015. Our efforts were assessed as strategic initiatives toward raising awareness, seen from when women join a company to executive training.

### Employing People with Disabilities

Based on the concept of normalization, when employing people with disabilities NTT Communications verifies their desires with regard to the type of work and working environment, so that all can make the most of their skills, gives due consideration to their suitability and decides on their job descriptions.

As of March 1, 2016, 190 people with disabilities were employed in a broad range of fields, including sales and engineering, across the NTT Communications Group. Implementing recruitment drives for potential new graduate hires and, through employment agencies, for mid-career hires as well as regular support initiatives, we achieved a rate of employment of people with disabilities of 2.01%.

### Varied Career Designs

NTT Communications has in place a continued employment system that allows employees reaching the mandatory retirement age of 60 to continue working, if they wish, until they reach 65.

Based on the recognition of the need in the years ahead to face up to the reforms of existing businesses and to the challenges of new growth fields, we have been backing efforts to build tailor-made careers for employees in their 50s. While anticipating other ways of working following retirement age rehiring, these efforts will enable veterans to improve their willingness to take up challenges, display ongoing high levels of performance, and also enable them to continue working with motivation. As a result, our efforts are receiving high acclaim from outside agencies, including the Good Action 2015 award in the Factory Floor Revitalization category from the Rikunabi NEXT job portal site (February 2016).

### Number of Rehired Employees

Fiscal 2013	Fiscal 2014	Fiscal 2015
38	54	50

(Scope: NTT Communications [non-consolidated], excluding staff on temporary assignment)

### “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 examination-certified ICT skills as “CAVA operators,” who work as home-based ISP call center staff.

NTT Com CHEO is working to expand nationwide training opportunities through the introduction of home-based training via the Internet. At the present time, there are approximately 1,900 CAVA operators throughout Japan. This system of home-based operators utilizes untapped human resources such as women who have had to stop employment due to child raising or caring for other family members, as well as retired senior citizens. We institutionalized measures to help single parents become CAVA operators that were first initiated by NTT Com CHEO in fiscal 2009 with the aim of helping others achieve a better balance between work and childcare. We aim to expand employment opportunities by offsetting the cost of acquiring the necessary certifications and training to become CAVA operators.

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 this effort, we will expand operations beyond ISPs.

## Promotion and Training of Global Human Resources

### Global Human Resource Management (GHRM) Initiatives

Diversity management is attracting attention as a way of utilizing various concepts of values from a diverse workforce. We will have all Group companies work on GHRM as a unit with "Global One Team" as our key message to promote global activities by human resources.

In the long-term temporary assignment program that started in fiscal 2009, a total of 20 locally hired overseas employees have been seconded to the head office and are promoting global business in Japan. In fiscal 2004, we introduced a system for bringing mid-career employees of overseas subsidiaries to work at headquarters for six months. Through these programs, they succeeded in utilizing the skills they had learned and expertise they had acquired overseas at headquarters, and the resulting communication culminated in the "Global One Team" Promotion.

In fiscal 2015, NTT Communications expanded its reciprocal human resource exchanges with overseas subsidiaries. At the same time, we continued our initiatives of the previous fiscal year in areas such as global communications and pre-assignment training for NTT Communications and overseas subsidiaries. Since July 2011, eligibility for the overseas assignment program has been extended to young employees. This move develops employees who can succeed globally as soon as possible by dispatching new employees who have less than five years' experience in the Company to on-site locations overseas.

In the years to come, 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 through the promotion of global human resource exchanges.

### Recruiting Global Human Resources

Taking into consideration the rapid and dynamic changes in its operating environment, the NTT Communications Group established Vision 2020, 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 Perspective 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.

As a specific example of our efforts, we are not confining ourselves to the domestic employment market, but are stepping up our recruiting activities at overseas subsidiaries to uncover and hire the highest caliber personnel from outside Japan. In this manner, we are successfully welcoming to the Group outstanding personnel, particularly 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 on the campuses of overseas universities. In fiscal 2015, the countries in which we undertook local recruiting activities included the United Kingdom, South Korea, India, Singapore and Taiwan.

## Maintaining and Improving Employee Health

With regard to maintaining and improving environments, at all workplaces, in which employees can engage in their duties in a lively and vibrant manner, the basis can be said to be the creation of workplaces in which professional personnel are able to display their full potential. From this kind of perspective, we regard improving the work-life balance and the thorough implementation of occupational health and safety practices as two sides of the same coin. We therefore promote all kinds of measures designed to maintain and improve employee health.

### Main Achievements in Fiscal 2015 and Goals for the Coming Years

On the subject of improving the work-life balance, a Work-Life Committee formed between labor and management at each Group company and a Health and Safety Committee organized at each building to ensure the thorough implementation of occupational health and safety practices serve to accelerate initiatives across the entire NTT Communications Group. In fiscal 2015, the Work-Life Committee implemented a range of measures aimed at realizing working styles that help increase the efficiency and productivity of work. Having made the mitigation of incidents resulting in employee injury a priority issue, the Health and Safety Committee recorded 13 incidents (there had been 11 in the previous fiscal year). We thoroughly implement initiatives via each workplace on an ongoing basis to maintain and improve employee health.

### ■ Work-Related Accidents (Accidents while Working or Commuting)

Fiscal 2013	Fiscal 2014	Fiscal 2015
11 (working 3/ commuting 8)	11 (working 2/ commuting 9)	13 (working 6/ commuting 7)

\* Excluding corporate rugby team activities  
(Scope: NTT Communications (non-consolidated))

### Work-Life Balance

#### Work-Life Committee

The Work-Life Committee at NTT Communications 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 realizing working styles that help increase the efficiency and productivity of work, and ensuring that duties are carried out appropriately and thoroughly.

In fiscal 2015, in addition to working to promote awareness with respect to shorter working hours (such as the designation of promotional months for leaving work at regular times), the committee enhanced its edification activities. These included regularly distributing, by e-mail magazine to all employees, workplace activities designed to lead to improvements in business efficiency and to elicit communication. We also conducted e-learning sessions on such subjects as working hours to improve understanding of the various systems.

## Supporting Balance between Career and Child Raising/ Nursing Care

NTT Communication promotes Measures to Support Next-Generation Childcare, which emphasize the importance of the healthy upbringing of the children who will lead the next generation. We have formulated a General Business Action Plan to help provide an environment with a greater variety of working conditions, both to encourage a balance between employees' work and childcare and to address the needs of employees who are not raising children. We are working on an ongoing basis to reach the targets outlined in this plan.

Based on the Act on Advancement of Measures to Support Raising Next-Generation Children\*, we proactively engaged in action plans that led to us being designated as a certified business operator by the Tokyo Bureau of the Ministry of Health, Labour and Welfare for fiscal years 2008, 2011, and 2015. We are currently formulating our Fourth Action Plan (April 1, 2015 through March 31, 2017) to enable each and every employee to work in a lively and vibrant manner and are continuing to encourage the creation of workplace environments where diverse working styles are mutually accepted and understood.

In May 2016, NTT Communications received the highest (Class 3) certification among the certifications bestowed by the Minister of Health, Labour and Welfare based on the Act of Promotion of Women's Participation and Advancement in the Workplace (hereinafter the Women's Participation Promotion Act). Recognizing companies that have put in place the best measures for promoting the advancement of women, the evaluation of a number of our initiatives led to the certification. These initiatives include the maintenance of a system covering women continuing to work after childbirth, the promotion of measures supporting a work-life balance and career paths for women, in addition to an improvement in the ratio of women employees, the introduction of various career path options, and the results of the active promotion of women to management positions. Certified companies are allowed to use the Eruboshi certification mark.

\* Act on Advancement of Measures to Support Raising Next-Generation Children: This act promotes measures to support raising the next generation of children by creating an environment conducive to the healthy birth and upbringing of the children who will lead the next generation. Rather than relying on plans by national or regional public sector organizations, this act calls upon companies with 101 or more employees to formulate and promptly submit General Business Action Plans. Companies with 100 employees or fewer are encouraged to make efforts on this front as well.

### ■ New Kurumin logo



### ■ Eruboshi logo



### ■ Number of People on Childcare/Nursing Care Leave in Fiscal 2015

	Women	Men
Childcare leave	150	4
Nursing care leave	2	3
Maternity/paternity leave	76	—

## Promotion of Working Style Reform

Among a host of endeavors, the Company is promoting a system that allows employees to work from home along with other measures designed to increase productivity. These endeavors are designed to provide employees with the opportunity to make the most of their abilities and to help create a workplace environment in which employees can perform their duties with greater vitality.

Having decided on a system for working from home (WFH) to aid childcare and nursing care commitments, which is currently (June 2016) used by around 390 people, we at first promoted more flexible working styles across a diverse range of employees.

Over and above the WFH system, we are accelerating the implementation of working style-related measures that are unique to an ICT company. We created an environment that would allow employees to work from remote locations by using a thin client system that enables work to be undertaken even when visiting clients outside the office or on a business trip. The use of tablet computers also allows staff to make more effective use of their spare time. Furthermore, particular emphasis was placed on reducing the number of documents and increasing the efficiency of meetings. To this end, we continued to undertake edification activities using Meeting 1/8th\* posters while adopting paperless meeting tools to simplify the manner in which meetings are conducted.

\* A method for increasing the efficiency of meetings by reducing by half the number of participants in, the time taken for, and the materials used during each meeting.

## Cafeteria Plan

To cater to their varying lifestyles and needs, NTT Communications offers various benefits to all its employees equally throughout their time in our organization. Specifically, we have introduced a "Cafeteria Plan" system, which allows employees to choose from a wealth of benefit options (a total of 45 options in fiscal 2015) that suit individual employee lifestyles. In order to provide employees with life design support, we also set up a life design consultation office, which was used by 133 employees in fiscal 2015. We also offer life design training to 30-year-old employees and second-life seminars for those aged 59. In fiscal 2015, 155 employees participated in the former, while 111 employees attended the latter.

We will continue enhancing our programs and menus to make them more employee-friendly.

## Encouraging the Planned Taking of Various Types of Leave

Working toward improvements in the work-life balance of its employees, NTT Communications is encouraging the taking of leave. Specifically, we increase awareness about the taking of leave to coincide with long national holidays, such as during Golden Week and over the New Year period, and endeavor to create working environments that facilitate the taking of leave. In fiscal 2015, the average number of paid leave days taken was 18. There is also a life plan holiday system that enables the taking of leave for a certain period of time, for employees who want to take a break, for nursing family members, volunteer activities, recurrent training and child care. In fiscal 2015, 1,712 people took advantage of this system.

## Occupational Safety and Health Management

### Mental Healthcare

We are implementing various measures to secure occupational safety based on the creation of work environments that ensure the health and comfort of our employees.

With regard to measures taken in mental health, 195 employees took the "mental health keeper" training course designed to further enhance on-the-job mental health care for employees, bringing the total number of those certified to 2,685.

In addition, we offer various other services on a continual basis, including counseling for high-risk employees based on reports issued by Japan's Ministry of Health, Labour and Welfare (a total of 389 participants in fiscal 2015). In putting in place a comprehensive support structure, we also provide employee consultation desks both inside and outside the organization as well as a counseling environment geared toward employees being sent on overseas assignment. In the years to come, we will continue to implement various measures that include Group companies in Japan to ensure healthy and comfortable work environments. We will also work to further strengthen line care.





# Contributions to the Global Environment

Expectations are high for activities to protect that global environment at ICT companies. Thus far, we have established a Green ICT Vision 2020 that focuses on three areas—the realization of a low-carbon society, the promotion of a recycling-based society, and the preservation of biodiversity—and are promoting a multifaceted approach.

The proactive promotion of activities necessitates the upgrading and strengthening of an environmental management framework. We will make efforts to strengthen a global, seamless environmental management framework as the NTT Group. To this end, we will aggressively pursue protection of the global environment in all processes pertaining to our business activities, ranging from reduced electricity usage and improvements in efficiency as well as procurement to operations and waste disposal.

We will thereby help to establish an environmentally friendly society and ensure that the Earth remains in a healthy state for future generations through our core businesses.

## Basic Philosophy and Vision

**While emphasizing the philosophy in the Global Environmental Charter established by the NTT Group, our environmental protection activities take shape as the Green ICT Vision that applies that philosophy to the characteristics of our business. We set initiative goals and implement measures on an ongoing basis.**

### ▶ NTT Communications Group Global Environmental Charter

The NTT Group has established the NTT Group Global Environmental Charter to promote Group-wide consideration and action relating to environmental protection from a global perspective. 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 the implementation of environmental protection activities.

### ▶ 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 numerical target values 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 as well as 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 cares and shows consideration for 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.

## ▶ Activity Achievements in Line with CSR Indicators

In fiscal 2015, in line with the three focus areas—the realization of a low-carbon society, the promotion of a recycling-based society, and the preservation of biodiversity—we worked to reduce the environmental impact associated with our business activities and in particular took steps to reduce our CO<sub>2</sub> emissions and improve the final disposal rate both in Japan and overseas. In specific terms, we achieved results across the Group, including the expansion of environmental management at overseas bases, the extension of greenhouse gas reduction initiatives across our global operations, and the implementation of measures to improve the final disposal rate.

In fiscal 2016, we will maintain our focus on reducing environmental impact both in Japan and overseas. In advancing a variety of global measures, we will continue to channel our energies toward reducing electric power consumption, recycling waste, cutting back the volume of paper use, and promoting initiatives aimed at preserving biodiversity.

### Fiscal 2015 Activity Achievements

Priority Activity	Measure	Fiscal 2015 Targets		Fiscal 2015 Achievements		
		Qualitative Target(s)	Quantitative Target(s)	Status of Specific Activities	Quantitative Result	Self-assessment
Creating a Low-Carbon Society	Reduction of own CO <sub>2</sub> emissions	Reduce electricity use through energy-saving activities, R&D technologies, and operational improvements	CO <sub>2</sub> emissions: 278,000 t-CO <sub>2</sub> or less (CO <sub>2</sub> emission coefficient is 0.33 kg-CO <sub>2</sub> per kWh.)	<ul style="list-style-type: none"> <li>Expanded buildings with SmartDASH and climate controls for reducing the electricity used in air conditioning systems, upgraded to LED lighting, turned off power to equipment used in degenerated services</li> <li>Continued promotion of energy-saving activities</li> </ul>	266,000 t-CO <sub>2</sub>	★★★
Promoting a Recycling-Oriented Society	Improve recycling rates	Thoroughly implement the 3Rs—reduce, reuse, recycle—for all resources associated with our business activities.	Recycling rates Dismantled telecommunications equipment: At least 99% Construction waste (Specified Materials): At least 99% Construction waste (Other): At least 75% Office waste: At least 88%	<ul style="list-style-type: none"> <li>Improved the recycling rate for glass and ceramic scrap from dismantled telecommunications equipment</li> <li>Subcontracted to processing companies with higher recycling rates</li> </ul>	Recycling rates Dismantled telecommunications equipment: At least 99.9% Construction waste (Specified Materials): At least 100% Construction waste (Other): At least 71.5% Office waste: At least 89%	★★
	Reduce paper usage	<ul style="list-style-type: none"> <li>Strengthen measures at the level of individual organizations based on data on multifunction printer usage</li> <li>Promote paperless working style that utilizes ICT equipment</li> </ul>	8,500 sheets per person	<ul style="list-style-type: none"> <li>Strengthened measures at the individual organization level based on multifunction printer usage data</li> <li>Promoted paperless meetings</li> <li>Reduced paper usage by reassessing business systems</li> </ul>	6,565 sheets per person	★★★
Biodiversity Conservation	Biodiversity conservation using ICT	Proactively develop and provide products and services that contribute to the preservation of social biodiversity	—	<ul style="list-style-type: none"> <li>Worked to conserve coral reefs through business activities at NTT Plala</li> <li>Undertook wildlife damage countermeasures that efficiently employ IT at NTTPC</li> <li>Disseminated information about the environment and ecology at NTT Resonant (goo Green Label)</li> </ul>	—	★★★

Self-assessment: ★★★ Good progress   ★★ Basically on target   ★ Slightly behind target  
(Scope: 14 domestic companies of the NTT Communications Group)

\*1 The CO<sub>2</sub> emission coefficient is 0.33 kg-CO<sub>2</sub> per kWh.

\*2 Final disposal rate is calculated as the volume of waste transported to the final processing site divided by the total volume of waste generated.

### Activity Indicators and Achievements (at Overseas Bases) Item

Item	Implementation rate*
Switch off unnecessary lighting, air-conditioning, and PCs	80%
Promote the sorting and recycling of waste according to the circumstances of each building	43%
Implement double-sided and double-page office paper printing	75%

\* Implementation rate = Number of bases implementing target ÷ total number of bases

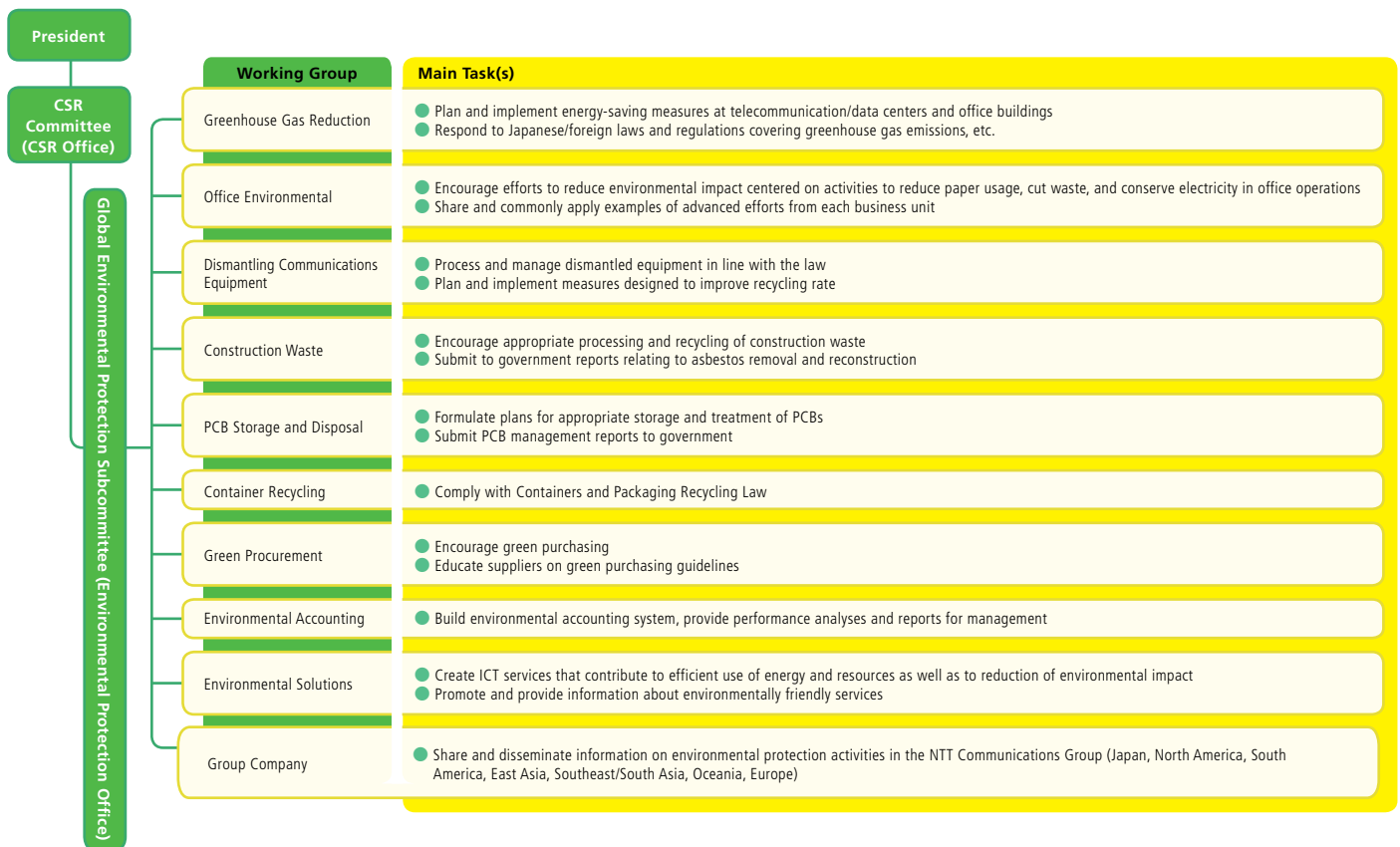
# Environmental Management

## Promotion Framework toward Reduction of Environmental Impact and Fiscal 2015 Initiatives

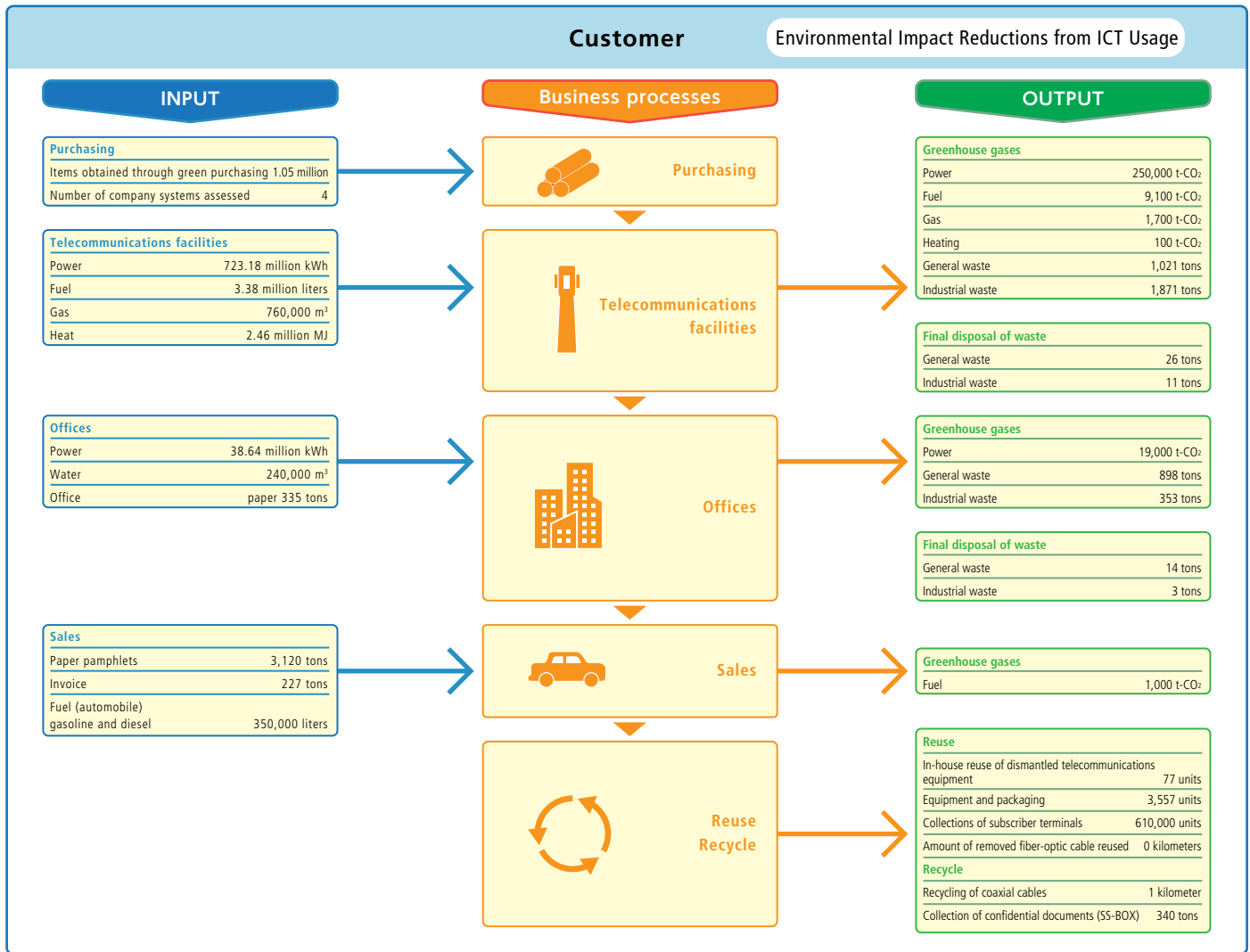
In order to continuously promote environmental protection initiatives, we formed a working group for each issue, involving the entire NTT Group in tackling environmental issues. Specifically, we hold Environmental Protection Subcommittee meetings at Group companies twice a year to formulate an overall plan encompassing a wide range of issues, including the reduction of greenhouse gas emissions and waste and the promotion of environmental solutions. Through these meetings, we also share information on the results of actions taken and promote the horizontal deployment of various initiatives. In recent years in particular, we have been making efforts to ascertain and curb environmental impact by means of Scope 3 at the supply chain level and have expanded the scope of the categories covered since fiscal 2014.

As far as the environmental management structure for our bases in Japan is concerned, we are promoting environmental protection activities at 14 companies. At our overseas bases, with a view to promoting global environmental management we are expanding our management bases, assigning officers responsible for environmental matters, gathering activity information, and encouraging the sharing of information between bases in Japan and overseas. In the years to come, we will hold global environmental management meetings and would like for these to lead to further reductions in environmental impact.

### Environmental Protection Framework



Fiscal 2015 Material Flow



In performing these calculations, we have referred to unit emission databases and other materials—produced through studies by the Ministry of the Environment and other government ministries and agencies—and expanded the scope of target categories. Of the 15 target categories, our calculations include 10 that are relevant.

■ Volumes of Scope 3 Emissions by Category

Categories	Share	Greenhouse Gas Emissions (t-CO <sub>2</sub> )
1 Purchased goods and services	13.13%	546,620
2 Capital goods	15.47%	644,126
3 Fuel and energy activities not included in Scope 1 and 2	1.97%	76,565
4 Upstream transportation and distribution	0.13%	5,218
5 Waste generated through business activities	0.01%	219
6 Business travel	0.37%	14,478
7 Employee commutation	0.32%	12,270
8 Upstream lease assets	0.00%	0
9 Downstream transportation and distribution	0.00%	0
10 Processing of products sold	0.00%	0
11 Use of products sold	63.30%	2,460,312
12 Disposal of products sold	2.61%	101,263
13 Downstream leased assets	0.00%	0
14 Franchise	0.65%	25,394
15 Investment	0.00%	0
<b>TOTAL</b>	<b>100.00%</b>	<b>3,886,464</b>

## Environmental Accounting in Fiscal 2015

The NTT Communications Group tabulates its environmental conservation costs (categories corresponding to business activities) and the economic benefit derived from its 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. The environmental conservation cost in fiscal 2015 declined by approximately ¥1.12 billion year on year to ¥1.91 billion, consisting of around ¥0.7 billion in investments and about ¥1.21 billion in expenses, owing to the completion of investment plans for the building out of systems to reduce air conditioner electricity usage.

On the other hand, the economic benefit derived from environmental conservation in fiscal 2015 decreased by approximately ¥0.87 billion from the previous fiscal year to ¥1.71 billion. Equipment re-use had the effect of reducing the cost of new purchases by around 70% compared with the previous year.

### ■ Environmental Conservation Costs (Categories Corresponding to Business Activities) (Millions of yen)

Category	Key Measures	Investment		Expenses		
		FY2014	FY2015	FY2014	FY2015	
(1) Business area cost		1,606	693	415	468	
Breakdown	1. Pollution prevention costs	• Oil tank facility for power generator use • Management of items using PCBs	121	117	112	24
	2. Global environmental conservation costs	• Measures to reduce CO <sub>2</sub> emissions resulting from electricity use	1,485	576	89	174
	3. Resource circulation costs	• Waste disposal and reuse expenses	0	0	213	270
(2) Upstream/downstream costs	• Measures to recover, recycle and reuse telecommunications equipment	114	7	755	496	
(3) Administration costs	• Environmental conservation management activities	—	0	74	69	
(4) R&D costs	• Allocated portion of NTT Group environmental R&D costs	—	0	56	169	
(5) Social activity costs	• Costs of supporting volunteer participation	—	0	3	5	
(6) Environmental remediation costs		—	0	0	0	
Total		1,719	699	1,303	1,206	

### ■ Economic Benefit Associated with Environmental Conservation Activities (Real Financial Impact) (Millions of yen)

		FY2014	FY2015
Revenue	Revenues from sales (cables, metal scrap, etc.)	185	90
Cost reductions	Reductions in expenses derived from measures such as reduced electricity usage	795	722
	Reductions in cost of purchases due to reuse of dismantled telecommunications equipment	1,114	408
	Decrease in postal and paper costs from utilization of Mypage	475	480
	Other	7	10
Total		2,576	1,710

Target period: April 1 - March 31

Scope: 14 domestic companies of the NTT Communications Group

Tabulation and disclosure: Figures were tabulated in line with the Ministry of the Environment's Environmental Accounting Guidelines 2005 and NTT Group Environmental Accounting Guidelines. Expenses include personnel expenses but exclude depreciation.

## Environmental Management Structure

### Acquiring ISO 14001 Certification

Five companies within the NTT Communications Group had acquired ISO 14001 certification as of March 31, 2016. Through contracts with outside environmental consultants, certified departments and companies undergo internal audits once a year to ensure appropriate implementation of environmental management and continual improvements that will allow a steady reduction of the environmental impact of business activities. Regular reviews and renewal examinations are also undertaken by an independent certification body. Outstanding issues are thus identified and remedial measures swiftly taken. Besides initiatives centering on reductions of office paper and electricity usage and the promotion of waste recycling, we are encouraging measures toward the creation of an environmentally friendly society.

#### ■ ISO 14001-Certified Company

ISO 14001-Certified Company		Date of Certification
NTT Communications Corp.	Procurement Dept.	October 1999
	Solution Services Dept.	March 2004
NTTPC Communications, Inc.		November 2003
NTT BizLink, Inc.		March 2007
NTT Com Solutions Corp.		April 2007
NTT Plala Inc.		December 2011

As of March 31, 2016

### Environmental Audits and Environmental Surveys

Guided by its Global Environmental Charter, the NTT Communications Group issues twice-yearly PDCA and other reports at the Global Environmental Protection Subcommittee, an organization that comes under the CSR Committee. These reports outline details of the various activities administered by the 10 working groups (WGs) that drive the Group's environmental protection activities. In addition to sharing information and calling for further development of effective initiatives, we are promoting environmental management on a Groupwide basis.

### Compliance with Environmental Legislation and Regulations

The NTT Communications Group devotes itself to ensuring legal compliance and proper risk management while liaising closely with the other corporations of the NTT Group. Including environmental laws and ordinances that look to curtail pollution, emissions standards and the PRTR Law\*, legislation of all kinds 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 2015. We plan to continue our Companywide efforts to prevent environmental pollution and comply with related laws and regulations.

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

### Promoting Green Procurement

NTT Communications issued its Guidelines for Green Procurement in 1999. In 2010, the Company brought these guidelines into compliance with the Energy-Saving Performance Guidelines enacted by the NTT Group and, at the same time as adding the energy-saving (Green of ICT) perspective of ICT itself that was considered an issue, renamed the Energy-Saving Performance Guidelines as the Guidelines for Green Procurement.

By applying these guidelines, NTT Communications has added an environmental conservation element to such areas as its own approaches to environmental conservation in the selection criteria of suppliers with which the Company allows dealings and in procurement.

Through its green procurement initiatives NTT Communications works to improve its environmental conservation activities hand in hand with all its suppliers and would like to continue to be of service in realizing further contributions to society.

#### ■ Status of Green Procurement and Green Purchasing

	Fiscal 2011	Fiscal 2012	Fiscal 2013	Fiscal 2014	Fiscal 2015
Green procurement of goods excluding office supplies (1,000 units)	1,230	1,380	1,410	1,200	1,050
Green procurement of office supplies (1,000 units)	350	260	240	250	200

### Environmental Education Initiatives

We offer environmental education to all employees, aiming to raise their awareness of environmental matters. We are also proactive in environmental awareness activities as part of our CSR efforts, extending the scope of participation to include not just employees, but also their families and business partners.

In fiscal 2015, while continuing to offer environmental education in a variety of places, including all-employee training sessions, we undertook a range of environmental awareness and education activities, including a cleanup of the areas surrounding our offices and promotion of the ecocap movement. In addition, woodland conservation activities were carried out at NTT Com Solutions and NTT Com Marketing in a bid to raise the level of understanding regarding the importance of protecting the natural environment.

# Creating a Low-Carbon Society

Although the advancement and spread of ICT have given rise to such benefits as an affluent society and convenient lifestyles, the increase in power consumption due to ICT-related equipment is placing enormous pressure on the environment. Fully aware of this situation, NTT Communications Group employees set targets from three viewpoints—telecommunications, offices and overseas bases—and are working together to reduce CO<sub>2</sub> emissions. Particularly in the case of improvements in the energy efficiency of telecommunications equipment, which account for around 90% of total CO<sub>2</sub> emissions from business activities, they are currently making efforts to be the first in the industry to introduce leading-edge technologies.

## Reduction of Greenhouse Gases

### Fiscal 2015 Results and Fiscal 2016 Outlook

When calculating the volume of greenhouse gas emissions that we generate, we include in the scope buildings owned by other companies, including those buildings where we rent space as well as data centers (DCs) that provide colocation services, in addition to buildings owned by the NTT Communications Group.

In fiscal 2015, CO<sub>2</sub> emissions\*<sup>1</sup> by the NTT Communications Group totaled 266,000 t-CO<sub>2</sub>. This was 12,000 t-CO<sub>2</sub> less than the Group's established target and a decrease of approximately 1.5% compared with the previous fiscal year. Furthermore, in fiscal 2015 sales per unit of CO<sub>2</sub> emissions improved around 6.0% compared with their fiscal 2014 level due mainly to a decrease in the amount of CO<sub>2</sub> emissions and an increase in sales.

In the case of telecommunications equipment, we concentrated our efforts on proactively curtailing the power used for air-conditioning by, for example, conducting "airflow improvement" initiatives in the server and machinery rooms at communication and data center buildings and installing integrated air-conditioning control systems such as SmartDASH. In offices, we continued with the detailed energy-saving measures that had been implemented previously. By taking these initiatives we had a major effect and data center sales remained robust, ending in the results given above.

In fiscal 2016, the NTT Communications Group will continue to make a concerted effort to save energy. By deploying R&D technologies and introducing energy-saving rules and other new measures, we set a target for CO<sub>2</sub> emissions of 272,000 t-CO<sub>2</sub> or less.

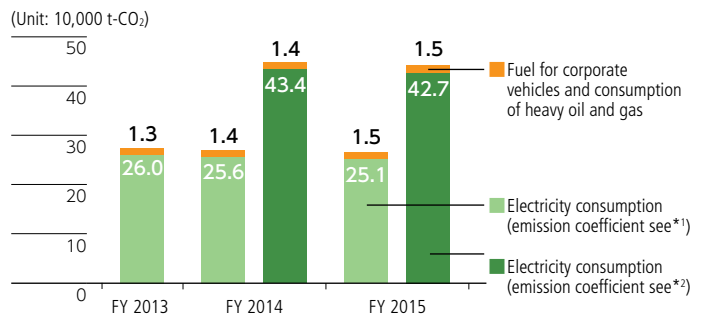
At our overseas facilities, fiscal 2015 CO<sub>2</sub> emissions showed an upward trend, totaling approximately 348,000 t-CO<sub>2</sub> (approximately 338,000 t-CO<sub>2</sub> for data centers and 10,000 t-CO<sub>2</sub> for offices), reflecting a significant increase in demand for cloud services and data centers, the commencement of operations at new data centers, as well as the wider scope of calculation. We are working to reduce electricity use at overseas data centers by operating highly energy-efficient buildings and facilities, such as data-center buildings that have acquired LEED\*<sup>2</sup> certification. To the same end in Japan, we are also rolling out high-performance solutions designed to reduce air-conditioning energy consumption. We will continue these measures in fiscal 2016.

We are taking steps to consolidate the servers, air-conditioning, UPS, lighting, and other equipment and facilities previously set up and operated by customers at data centers with the aim of improving the efficiency of society's power consumption by providing energy-efficient data centers and cloud services.

\*1 CO<sub>2</sub> emissions are calculated using the fiscal 2020 CO<sub>2</sub> emission coefficient target of 0.33 kg-CO<sub>2</sub> per kWh of the Federation of Electric Power Companies in Japan.

\*2 An acronym for Leadership in Energy and Environmental Design, LEED is a certification system for entire buildings promoted by the U.S. Green Building Council that evaluates energy savings and environmental impact.

### CO<sub>2</sub> Emissions from Business Activities

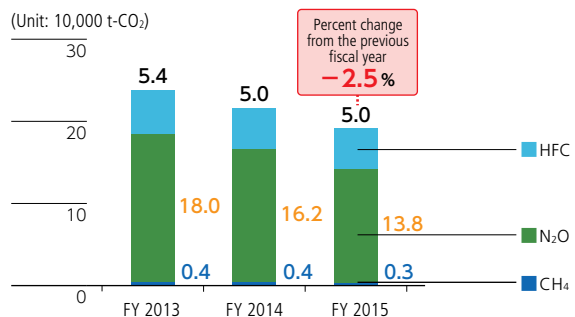


(Scope: 14 domestic companies of the NTT Communications Group)

\*1 The CO<sub>2</sub> emission coefficients used in the light green bars are the fiscal 2020 target of 0.33 kg-CO<sub>2</sub> per kWh of the Federation of Electric Power Companies in Japan.

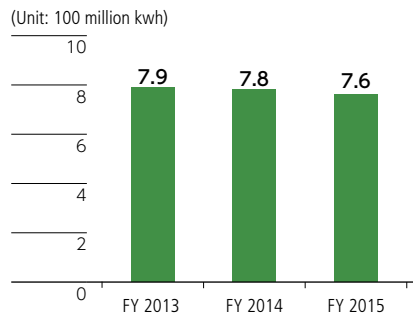
\*2 The CO<sub>2</sub> emission coefficients used in the dark green bar are from electric power companies.

### Other Greenhouse Gas Emissions (Converted to CO<sub>2</sub> Equivalents)



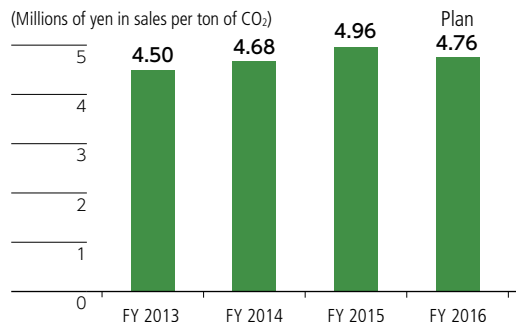
(Scope: 14 domestic companies of the NTT Communications Group)

### Power Purchases



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

### CO<sub>2</sub> Emissions per Unit of Sales



## Initiatives Related to Telecommunications Facilities

### Fiscal 2015 Results and Plans for Fiscal 2016

In fiscal 2015, CO<sub>2</sub> emissions decreased approximately 1.7% from their fiscal 2014 level, to 250,000 t-CO<sub>2</sub> (12,000 t-CO<sub>2</sub> below our target), due to factors such as the start of sales at our new data centers in Tokyo and Osaka, the augmentation of cloud server equipment and expanded measures to reduce electricity use in air conditioning systems.

We expect CO<sub>2</sub> emissions to trend upward in fiscal 2016 due to ongoing robust data center and cloud service sales. However, we have set our emissions target at below 255,000 t-CO<sub>2</sub>, which we aim to achieve through new measures that include the application of R&D technologies, "airflow improvement" initiatives and equipment removal for the purpose of right-sizing telecommunications equipment.

### Building Cutting-Edge Data Centers with Advanced Low-Carbon Technologies

Data centers require a constant supply of electric power to operate. As a global ICT company, we proactively introduce the latest equipment and technologies from around the world with the aim of reducing the carbon footprint of our data centers.

For example, in Japan, the Osaka 5 data center, which was built in 2016, features improved cooling efficiency and lower power consumption in air conditioning systems, owing to the deployment of an indirect external air cooling system that takes advantage of cooler temperatures outside the building and an air circulation method that blows air from walls, a first of its kind in the industry. Overseas, our Hong Kong Financial Data Center, one of the largest in Hong Kong, was expanded and upgraded in 2015 with server racks featuring better cooling efficiency and the cooling wall system. Moreover, water-side economizers switch off air conditioners during cold weather and turn to cooling towers instead as thermal exchangers. This improves energy efficiency by roughly 16% for the entire air conditioning system.

We are accelerating global efforts to reduce the carbon footprint of our data centers by continuing to introduce leading-edge equipment and technologies.

### Ongoing Efforts to Cut Air Conditioner Power Consumption at Existing Telecoms Facilities

Having targeted a 20% reduction in the electricity consumed by air conditioning, we have implemented a range of measures, such as SmartDASH, an automated system that visualizes temperature zones in server rooms, detects areas that are too cold, and automatically readjusts temperatures, as well as Aisle Capping, which is a technique that physically separates the intake (low temperature) and exhaust (high temperature) air from IT equipment by strategically placing vinyl sidewalls and ceilings around IT equipment in the aisles between rows of server racks.

In fiscal 2015, we implemented "airflow improvement" initiatives across a total of 135 buildings for the purpose of optimizing the use of electricity in air conditioning.

Key initiatives included the installation of Blank Panels, which block the front of unused spaces in server racks in telecommunications buildings and data center buildings, as well as measures to improve airflow, such as the integration of hot air flows from ICT equipment and the adjustment of cold air flowing up from the floor. Other measures entailed upgrading to high-efficiency air conditioners, reviewing energy-conserving operations, and optimizing room temperature. Moreover, we upgraded all lighting to LEDs in Japan.

NTT Communications will continue to implement measures in Japan and overseas to bring about further reductions in power consumption.

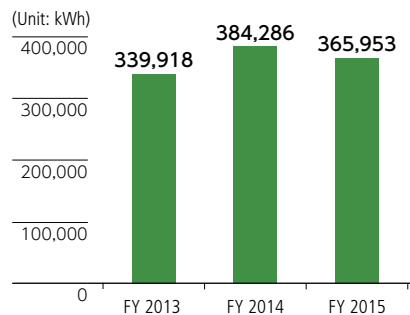
### Introducing Solar Power Generation Systems that Actively Utilize Renewable Energy

NTT Communications has been engaged in power generation using solar power generation systems at its communications and data center buildings in Tokyo since 2009.

Currently having four system units in operation, we generated approximately 366,000 kWh of electricity in fiscal 2015. The power generated is used to light communal areas of the buildings.

Overseas, we generate solar power at our data centers in Singapore and Malaysia. We have installed a solar-powered heating system at our Hong Kong data center, a wind power generation system at our data center in India, and hydroelectric power generation systems at our data centers in Vietnam and Germany. In fiscal 2015, these facilities generated approximately 46.0 million kWh of electricity. In the years to come, we will continue to promote the utilization of environment-friendly renewable energy.

#### Overall Amounts of Electricity Generated by Solar Panels at Data Centers in Japan



#### Solar Panels Installed at Tokyo No. 5 Data Center



#### Solar Panels Installed on the Rooftop of Our Data Center Building in Malaysia



→ [Click here for details regarding solar power generation.](#)



## Office Initiatives

### Fiscal 2015 Results and Plans for Fiscal 2016

From the perspective of supplying services to customers, communications facilities — including data centers and telecommunications buildings—necessitate the constant use of a specific amount of electric power. For that reason, drastic measures to save electricity in their offices are to be expected.

In fiscal 2015, we continued to follow energy-saving measures that have been in place since the Great East Japan Earthquake. Accordingly, CO<sub>2</sub> emissions amounted to 16,000 t-CO<sub>2</sub> (approximately on target), the same level as in fiscal 2014. Although we will relax these measures slightly in fiscal 2016, focusing instead on energy-saving measures through better work efficiency, we are targeting emissions of 17,000 t-CO<sub>2</sub> or less. We intend to meet this objective by revising energy-saving rules and by increasing the deployment of thin-client PCs.

### Summer and Winter Energy-Saving Measures

In addition to summer and winter energy-saving measures, the NTT Communications Group implements ongoing electricity-saving measures—including the use of energy-saving settings on PCs, the operation of fewer lighting fixtures and elevators, and the adjustment of air-conditioner settings—and strives to reduce its energy consumption in Japan.

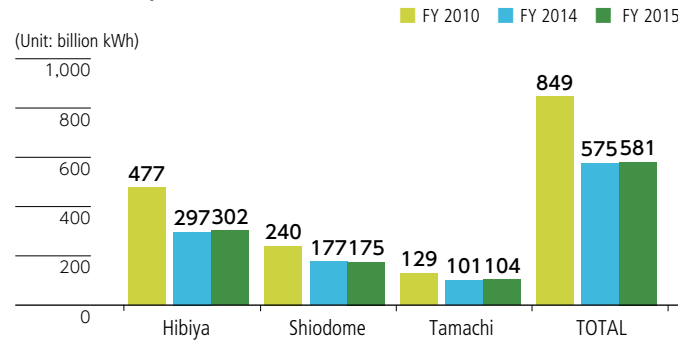
During the summer months, the Group targeted a reduction in electricity consumption of 30% from the fiscal 2010 level. Over the period in question, the Group accordingly undertook a variety of measures. For example, every effort was made to maintain higher air-conditioner settings (at 28°C in summer), cut back the number of lights employed, encourage the use of stairs when going up four floors or down five, and encourage employees to wear summer clothing and switch off office automation equipment when leaving the office. Thanks largely to these endeavors, in fiscal 2015 the Group achieved a reduction in electricity consumption measured in kWh of approximately 31% at its three principal Hibiya, Shiodome, and Tamachi buildings. As in summertime, we introduced measures to save energy in winter, including setting air-conditioning temperatures at 20°C.

In the same way as at our bases in Japan, we are adopting an aggressive stance on measures to save energy at our overseas facilities, having established as an indication the switching off of unnecessary lighting, air-conditioning and personal computers. The main initiatives involve switching off lighting, air-conditioning and PCs when not in use and at the end of the work day; using the power saving setting on PCs; and making a thorough effort to adjust office thermostats. In this way, we are promoting the same level of energy saving awareness as at our offices in Japan. Besides these, we are implementing a variety of initiatives in each region.

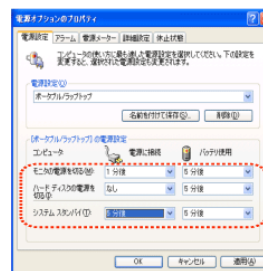
- East Asia region: Upgraded to LED lighting, adjustments to air-conditioner settings in the summer and winter, stopped using air conditioners in the spring and fall
- Southeast and South Asia region: Turn off lights during lunch hour and while working when possible, deploy LED lighting, make sure power is turned off when the last person leaves the office
- Europe region: Automatically turn off lighting and air conditioners, car leasing
- United States: Environment Day, make sure power is turned off when the last person leaves the office

In China and Vietnam, we also set power saving targets, take a proactive and progressive approach to reduction measures and aim to meet these targets.

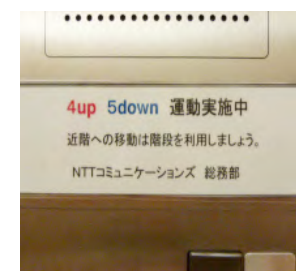
### ■ Average Electrical Consumption in Office Buildings between June and September



### ■ Automatically Changing the Settings of PCs to Electricity Saving Mode



### ■ Elevator Display Promoting the 4 Up, 5 Down Campaign



### Encouraging Energy Conservation in Offices by Finely Managing Individual Air Conditioners

NTT Communications manages individual air conditioners for each floor section of its office buildings as a way to conserve energy. At the Hibiya Building, our head office, employees are prohibited in principle from using individual air conditioners. However, individual air conditioners can be used in the event that building temperatures (28°C in the summer and 20°C in the winter) impede work or employee health, or when the building-wide air conditioning system is off. As an example of energy conservation using individual air conditioners, a logbook is kept for when they are used, by whom and for how long. The individual air conditioners work on a three-hour timer, just in case someone forgets to turn them off. The last person to leave the office is responsible for making sure each floor air conditioner is turned off. All of our offices take these and other incremental steps with the aim of effecting a major conservation of energy usage.

### Promoting Use of the Company's Internal Cloud

NTT Communications possesses a number of internal systems to provide its services to customers. Migrating these internal system networks to and integrating them with internal ICT infrastructure by means of a private cloud using server virtualization not only lessens environmental impact by rationalizing the number of servers, but the move also contributes to more robust service business continuity plans (BCPs) for customers utilizing the system. Based on the awareness of these kinds of aims, the Company is working to develop utilization of its internal cloud.

As of the end of fiscal 2015, we had migrated 223 internal systems to the internal ICT infrastructure, a move that reduced the number of servers that accommodate the migrated system by around 57%.

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.

## Transportation Initiatives

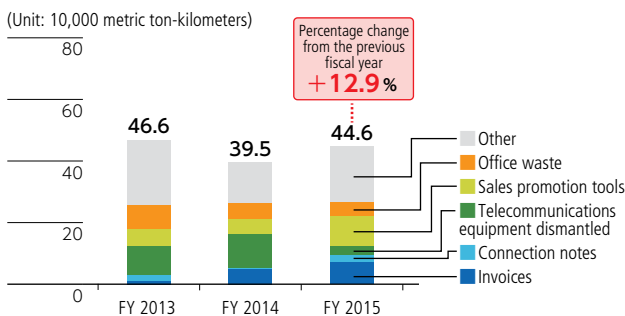
### Fiscal 2015 Results and Fiscal 2016 Outlook

We annually audit the amount of transportation 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.

In fiscal 2015, NTT Communications aimed to reduce transportation with digital versions of sales tools and manuals, but the volume of waste transported more than doubled compared with the previous year on account of an organizational shuffle and the removal of old equipment. As a result, transportation rose 12.9% year on year to 446,000 metric ton-kilometers.

In fiscal 2016, we will continue efforts to reduce transportation volume by encouraging the use of digital versions of internal tools and pamphlets.

### Goods Transportation Volume under the Revised Energy Conservation Law



(Scope: NTT Communications [non-consolidated])

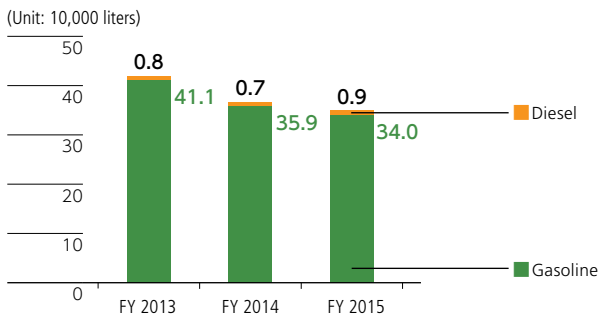
### Reducing Fuel Use by Company Vehicles

To help solve pollution problems and contribute to the realization of a low-carbon society, we have devised measures to introduce environmentally friendly vehicles and are addressing a reduction in the amount of fuel used by Company vehicles across the entire group.

The Company is currently reviewing the number of its sales vehicles and steadily promoting measures that include the more widespread adoption of driving techniques that show consideration for the environment. As a result, gasoline and oil consumption by Company vehicles in fiscal 2015 totaled 340,000 liters and 90,000 liters, respectively. Compared with the previous fiscal year, this figure represents a decrease of approximately 17,000 liters (5%).

For the introduction of eco-cars, we had set a target for 100% in fiscal 2015, and 99% was achieved that year through the optimum stationing of vehicles and a switching over to ecocars.

### Fuel Consumption by Company Vehicles



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

### Preventing Air Pollution and Promoting Energy Conservation through Electric Propulsion Ships

The undersea cable-laying ship Subaru is one of the few ships in Japan with an electric propulsion system (i.e., electricity from a generator drives the propulsion motor). The system helps prevent air pollution by reducing NOx and SOx contained in engine exhaust. Since the Subaru was built for a specialized use, unlike standard cargo vessels, the ship is characterized by low fuel consumption. Furthermore, in operating the ship, we realized energy savings of about 10% per year by efficiently controlling the number of generator-driven engines operating, for example, running three engines when heading to a construction site and running two 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.

### Cable-Laying Ship Subaru (9,557 tons)



### Ship Energy Efficiency Management Plan (SEEMP) Implementation

The adoption of SEEMP became a mandatory requirement in July 2011 under the MARPOL international treaty for the prevention of marine pollution caused by ships. As a result, it is now a compulsory requirement for ship operators to adopt the most effective operating methods (which include speed reduction, selection of the most appropriate route taking into consideration ocean currents and weather conditions, and proper maintenance) in order to curtail the amount of CO<sub>2</sub> emitted and to promote improvements in energy efficiency.

## Reducing the Carbon Footprint of Society through Our Services

### Fiscal 2015 Results and Fiscal 2016 Outlook

In addition to lowering carbon ourselves, we aim to help society reduce its carbon footprint by promoting our low-carbon services to customers. To this end, we have declared Green ICT as a vital management vision. Green ICT can be broadly divided into Green of ICT, which aims to reduce the environmental impact of ICT, as well as Green by ICT, which effectively deploys ICT to help reduce the environmental impact of society. In fiscal 2015, we advanced the development of solutions and services that strongly reduce CO<sub>2</sub> emissions in line with this vision, and proactively obtained and displayed designations from the Environmental Label System that describe the impact of our solutions and services in an easy-to-understand format.

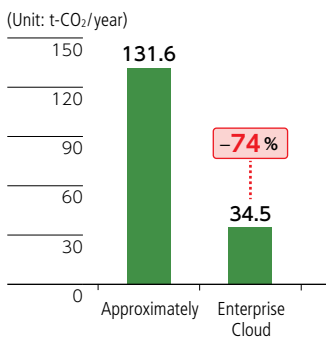
In fiscal 2016, we plan to measure the environmental impact of Nexcenter facilities as well as expand sales of cloud services and data center services in a bid to reduce the environmental impact of society.

### Reducing CO<sub>2</sub> by Enterprise Cloud Service

On a global basis, NTT Communications provides ICT solutions, including networks, cloud services, applications and security. In addition to contributing to society, these solutions help reduce environmental impact by curtailing CO<sub>2</sub> emissions.

Linking data centers, networks and servers, Enterprise Cloud is one example of a cloud service for companies that we are uniquely positioned to offer as a telecommunications operator. The service features a host of options, such as the ability to allocate resources flexibly in accordance with customer needs. As the core service can be used for backbone operations, customers can utilize Enterprise Cloud as a virtual server in place of servers and storage that they previously had to install and operate themselves. This service reduces the number of servers that companies need to operate, achieving a decrease equivalent to 97 t-CO<sub>2</sub> per year (approximately 74%) for small- and medium-sized companies. The service's system environment can be configured to use consistent specifications in Japan and overseas, thereby reducing configuration and operational costs substantially compared to what a client would experience if installing their own independent systems.

### CO<sub>2</sub> Reduction Effect by Enterprise Cloud



### California Sacramento 3 Data Center Supports ICT Companies in Silicon Valley

The United States represents over 50% of the global data center market, reflecting its robust ICT industry and growth in outsourcing of ICT environments, as companies increasingly use cloud resources. This market in the United States has been expanding by 19% or so annually. In April 2015, NTT Communications opened its third data center in Sacramento, the California Sacramento 3 (CA3) Data Center, to better serve its customers there.

This data center is located in a seismically stable area within 15 minutes of an international airport. Many ICT companies are drawn

to this data center for its security and excellent environmental performance. Specifically, the data center features leading-edge air conditioning systems that utilize external air and cold water for cooling, realizing strong energy conservation through efficient temperature management.

### Environmental Solutions Label System

The NTT Group is exploring the idea of an Environmental Solutions Label System for self-certification of environmentally friendly ICT solutions and services. To qualify, ICT solutions and services will have to achieve CO<sub>2</sub> 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 NTT Communications Group have registered a cumulative total of nine solutions for the Environmental Solutions Label, including Enterprise Cloud, Arcstar IP Voice and Arcstar Universal One Mobile in fiscal 2015. We aim to obtain more designations for the Environmental Solutions Label.

### Environmental Solutions Label



### Acquisition of eco-ICT Mark

After performing a self-assessment of our CO<sub>2</sub> reduction measures, we submitted an application in accordance with the ICT Ecology Guidelines created by the ICT Ecology Guideline Council\* and acquired the eco-ICT Mark.

The council created and published guidelines for appropriate CO<sub>2</sub> 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 seventh version publicly announced in February 2016. We will continue to participate in this initiative and work to instill the guidelines throughout the Group on an ongoing basis.

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

### eco-ICT Mark



# Promoting a Recycling-Oriented Society

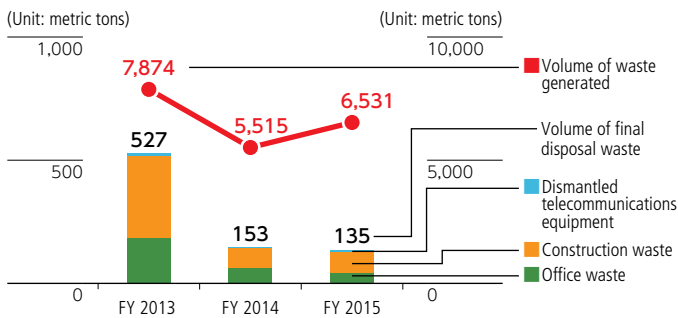
In aiming to contribute to the realization of a recycling-oriented society, we work to improve our reuse and recycling rates on a daily basis while building business models with low environmental impacts. Specifically, the NTT Communications Group is working to reduce the volume of waste in three areas—dismantled telecommunications equipment, construction waste and office waste—and promoting reuse and recycling in various aspects of its business.

## Fiscal 2015 Results and Fiscal 2016 Outlook

In fiscal 2015, the final disposal of waste from dismantled telecommunications equipment amounted to 10.7 tons, construction waste 82.2 tons and office waste 42.4 tons. The total volume of final disposal waste decreased 17.3 tons compared with the previous fiscal year to 135.3 tons, while the total volume of waste generated increased 1,016.2 tons to 6,531.4 tons.

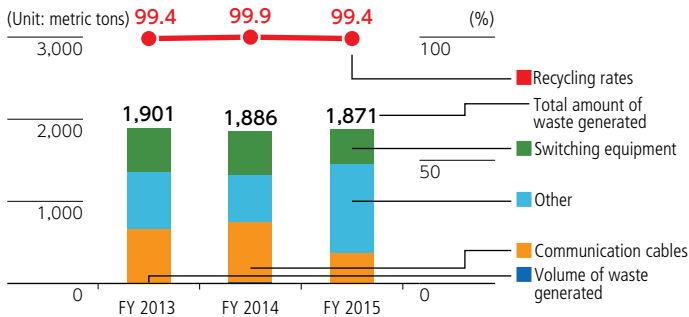
These initiatives led to minor improvements in the recycle rates for office and construction waste. Comparing both with the previous fiscal year, we were able to increase the office waste ratio from 88.2% to 89.5% and that for construction waste from 92.5% to 96.6%.

### NTT Communications Group Final Disposal Waste and Total Waste Generation



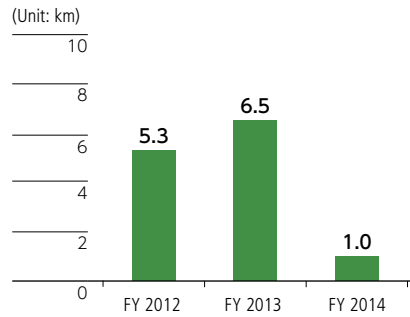
(Scope: 14 domestic companies of the NTT Communications Group)

### Total Volume and Recycling Rates of Dismantled Telecommunications Equipment



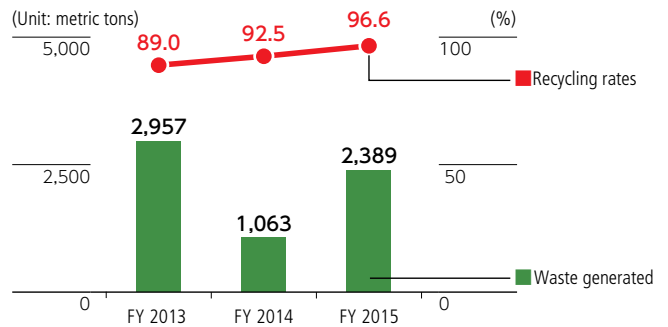
(Scope: 14 domestic companies of the NTT Communications Group)

### Volume of Reused Fiber-Optic Cable



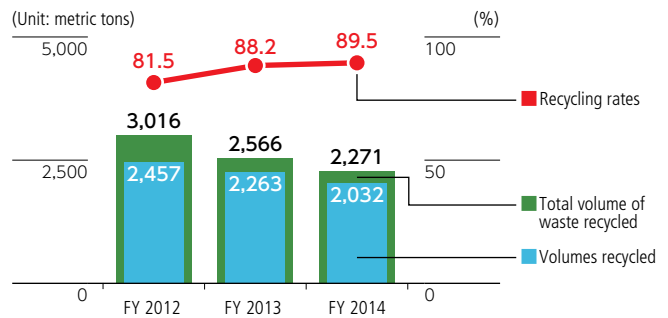
(Scope: 14 domestic companies of the NTT Communications Group)

### Construction Waste Generation and Recycling Rates



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

### Total Office Waste and Recycling Rates



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

## Building Business Models with Low Environmental Impact

### Initiatives to Improve Final Disposal Rate

We believe one of our most important obligations as a company that provides ICT services is to create business models that emphasize recycling. In line with this belief, we have been accelerating efforts since fiscal 2013 to improve the final disposal rate at our data centers, telecommunications buildings and office buildings.

We implement these measures focusing in particular on 7-8 buildings each year, starting with local surveys, checking the disposal workflow, and interviewing waste management companies about their disposal methods and requesting changes when needed. As a result, the final disposal rate for office waste, which was 6.1% in fiscal 2013, has been reduced to 1.9% as of fiscal 2015.

## Thorough Implementation of 3Rs in Office Buildings

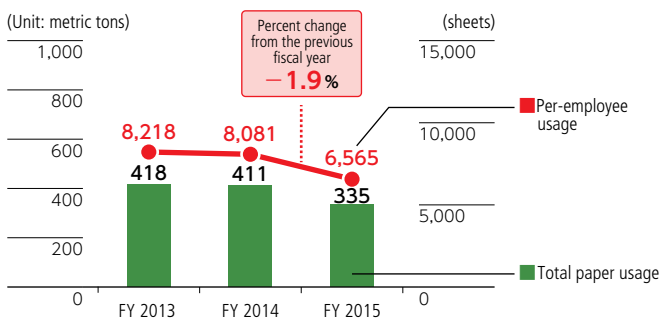
### Reduction in Paper Use for Business Purposes

NTT Communications is working to reduce usage of all kinds of paper for business purposes, including paper for business purposes and paper for printing customer billing statements. In fiscal 2007, we established a paper usage indicator per full-time employee in order to reduce office paper usage.

Specifically, we encourage reduction efforts that include the number of sheets used and the double-sided printing rate by the use of printing log data from IC card multifunction printers. Initiative status data are collected by individuals and sections, with the results disclosed to all employees on a monthly basis. As a result of having continued to encourage the digitization of paper documents and paperless meetings that make use of projectors and tablets, in fiscal 2015 paper consumed per full-time employee (converted to A4-size office paper) was 6,565 sheets, which beat the target of 8,500 sheets.

Turning to our operations outside Japan, Group companies also reduced copy paper usage and promoted paperless meetings. Targets were set and initiatives accelerated in China, Korea, Hong Kong, Thailand, Indonesia, Vietnam, the United Kingdom, Columbia and Germany.

### ■ Total and Per-Employee Office Paper Usage (Sheets)



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

### Thorough Water Conservation Initiatives

NTT Communications is working to reduce the amount of water used in its offices. As one aspect of these activities, in May 2013 we began installing water-saving valves on the toilet units at our head office building (the NTT Hibiya Building). As the water-saving valves are capable of measuring and separating the flow of the amount of water necessary, we were able to cut our water use by around 45%. The valves also employ usage data to verify water savings and the degree of environmental contribution.

We have installed these water-saving valves in 90 toilet units within the NTT Hibiya Building. The annual water-saving effect for fiscal 2015 was a decrease of approximately 4% compared with the NTT Hibiya Building's overall water usage prior to the valves' installation.

### Effective Utilization of Food Waste

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 the Gunma branch of NTT East Kanshinetsu acting as subcontractor.

In fiscal 2015, we processed 23 tons of kitchen waste. As a result, this was recycled and generated 2.3 tons of compost, which was put to use by farmers in the Kanto region and elsewhere.

This initiative is not merely an effective utilization of resources, as it is also important to note the CO<sub>2</sub> 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.

### ■ Bags of Compost



# Biodiversity Conservation

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

NTT Communications has established a set of action guidelines with regard to biodiversity conservation in order to promote activities that take concerns in this area into consideration. Giving thorough consideration of all aspects of business activities, from the construction of facilities to their operation and dismantling, the Company implements multifaceted initiatives along the lines of environmental contribution activities that naturally include participation in local conservation activities and the dissemination of information.

## Development of Activities in Line with Action Guidelines

Having formulated Biodiversity Conservation Action Guidelines, we have proactively developed approaches in line with each of the three environmental contributions through ICT—Green of ICT, Green by ICT and Green with Team NTT—that have been promoted for some time.

There is a growing awareness, on a global scale, with regard to biodiversity conservation. In the years to come, we will promote inspection efforts, identify issues and promote improvements across the Group as a whole, including at overseas bases.

### ■ Action Guidelines with Regard to Preservation of Biodiversity

**1. Basic Policy: Compliance with NTT Group Biodiversity “Approach Concept,” Established by NTT Group**

- **Development Centered on Business Activities**  
The Group recognizes that all activity is inextricably linked to the planet and to biodiversity, understands that the scope and impact at home and overseas 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 Relating to Preservation of Biodiversity

Initiative Items	Outlines of Initiatives
We implement actions that take into account the preservation of biodiversity in business activities (Green of ICT)	At the time of construction of a wireless relay station, conducting a habitat survey of the area’s plants, birds and insects, and implementing a construction plan that does not destroy ecosystems. Removal of wireless relay stations should be carried out in the same way.
	Providing wireless relay station space in an effort to facilitate the observation of wild bird protection
	Decreasing electric power consumption by making air-conditioning more efficient and improving lighting in communications and office buildings as well as through PC energy-saving measures
	Reducing the impact on ecosystems of product procurement by procuring best-selling devices and green purchasing
	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 cables
	Rainwater, recycled water used at data centers in Singapore, Hong Kong and Malaysia for air-cooled chillers and for watering plants. Reducing the amount of electricity used for lighting by efficiently applying natural daylight at data centers and office buildings in Vietnam
	Implementation of initiatives toward 5% year-on-year reduction in amount of water used at Taiwan office
We contribute to preservation of social biodiversity in business activities (Green by ICT)	Information Disseminated about the Environment and Ecology (goo Green Label)
	Work to preserve coral reefs through business activities
	Undertaking wildlife damage countermeasures that efficiently employ IT
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 cafeteria
	Forest maintenance, logging and tree-planting in cooperation with NPOs (Ome City, Tokyo and Shiroy City, Chiba Prefecture)
	Encouragement of personal cup use at vending machines
	Participation by NTT Taiwan in flora and environmental protection activities organized by the Taiwan Environmental Information Association
	Forest environment conservation and tree planting through Tokyo Greenship Action

## Considerations during Data Center Construction

As a global ICT company, we promote biodiversity considerations at our data centers. We promote a multifaceted approach at data centers in Japan and overseas.

### Minimizing the Influence and Impact on Local Ecosystems

Large-scale facilities like data centers make it necessary to keep in mind the effect they have on the surrounding ecosystem, such as the use of water resources at such facilities, pollution and drought. Without compromising any unique vegetation in the surrounding area, times of construction and on-site maintenance require a basis that implements ways to derive benefits from them while conserving biodiversity.

Naturally, at the Serangoon Data Center, a way was thoroughly developed to ensure that hazardous substances such as oil do not become mixed into the on-site water and cooling water that makes effective use of rainwater and recycled water (desalination and re-treated water). While actively incorporating a wide range of trees that are native to the area, great consideration is given to the on-site vegetation by conducting felling of those trees through consultation with the National Environment Agency (NEA).

#### ■ Data Center Plantings Give Consideration to Indigenous Species



### Consideration for Local Landscaping and Greening

We feel it is important to show consideration for biodiversity in facility designs that contribute to local greenery and in the surroundings.

At the Tokyo No. 6 Data Center, a large-scale urban facility, we took advantage of funding from the Tokyo Metropolitan Park Association's Urban Green Fund, working closely with the community to promote greening activities. The green spaces within the site have been planted into two zones: spring/summer and autumn/winter, so that visitors can enjoy seeing flowers at the site throughout the year. We have sought to achieve harmony between the data center and the surrounding community. For example, we have set up a wind-simulation environment and planted evergreen trees in the southwest corner, which is affected by wind.

#### ■ Spring/Summer Zone

#### ■ Autumn/Winter Zone



## Laying of Submarine Cables

In constructing its undersea network infrastructure, NTT Communications' fundamental policy is to prevent marine pollution. We are signatories to treaties on the prevention of marine pollution and, in addition to complying with environmental legislation, undertake initiatives that place importance on coexistence with marine organisms and the fishery industry.

Group company NTT World Engineering Marine Inc. (NTT-WE Marine), which handles the laying, burying and maintenance of underwater cables, promotes a strong awareness toward the preservation of marine ecology.

### Consideration Given to Impact of Cable-Laying

We conduct assessments prior to laying underwater cables and work with related government authorities and municipalities in carefully designing cable routes and drawing up construction plans. For example, we seek to avoid coral reefs and other inhabited areas in our efforts to avoid affecting the marine environment.

Moreover, before laying or burying submarine cables, we clean the planned ocean seabed route, bring to the surface debris from the seabed, including discarded nets, rope and wire for proper disposal as industrial waste to preserve the marine environment.

#### ■ Cables Laid on Sand, Away from Coral Reefs

#### ■ Trash Collected from the Bottom of the Ocean



### Consideration for the Impact of Cable-Laying Ships

Marine organisms that infest the chain lockers and safety maintaining ballast water of submarine cable-laying vessels have the potential to threaten native ecosystems in other parts of the ocean as vessels navigate from one area to another. As a result, the cable-laying vessel Subaru undertakes thoroughgoing measures to clean its anchor chain locker as part of its efforts to protect ecosystems. With regard to ballast water, ballast water treatment equipment that meets the standards set by the International Maritime Organization (IMO) was installed in January 2014. Since the equipment has an ultraviolet sterilization system that does not use chemical substances, impact on the environment is minimized.

In the case of ship paints, the effect that tin has on ecosystems has been recognized as an issue in recent years. We are therefore 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).

#### ■ Prior to Hull Painting

#### ■ After Hull Painting



## Upon Construction and Dismantling of Relay Stations

Underpinning data communication networks, wireless relay stations are often located in rich natural areas, such as on hills and islands. We thus emphasize consideration for biodiversity in their operation.

As of March 31, 2016, 12 of our 105 wireless stations were in national parks or quasi-national parks. The NTT Communications Group carefully builds 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 when dismantling wireless stations. We consult with residents and use local soil in our restoration activities.

We have also been acting appropriately and conducting activities that provide facilities from the perspective of wildlife conservation. For example, every year since September 2012, the Amami Ornithologists' Club NPO has held a Chinese sparrow hawk migration birdwatching meeting within the NTT Communications wireless relay station in Amami City, Kagoshima Prefecture. Wireless relay stations are normally off limits, but having received a request saying that the area is suitable for monitoring the status of the ecosystem, events are held with employees in attendance.

### Chinese Sparrow Hawk Migration



## Contributing to Ecosystem Conservation Using ICT

### Contributing through Products and Services

The damage to agriculture caused by wild boars and deer is becoming an issue of increasing concern across Japan's farming and mountain communities. The setting of traps is being used as one countermeasure to minimize the damage caused by wildlife. NTT PC Communications Inc. has developed "Mimawari Rakutaro" as one part of its "field cloud service." This is a wildlife observation and alarm device which utilizes an outdoor sensor that transmits data. In this manner, the company is contributing to countermeasures aimed at minimizing the damage caused by wildlife. Employing the communication services of NTT Docomo to automatically transmit a message to a designated mail address when a trap has been activated, the Mimawari Rakutaro device has brought about a significant reduction of the burden placed on patrols. As one version of Mimawari Rakutaro also comes equipped with a camera, the transmission of images further ensures an immediate response should a person be caught in a trap by mistake.

Since first going on sale in July 2011, Mimawari Rakutaro has been adopted by 46 local governments across Japan and contributed to ecosystem conservation in woodlands. As a recent example of its use, Wakayama City has deployed Mimawari Rakutaro to monitor traps and send notifications via M2M in order to mitigate damage caused by wildlife and better understand ecosystems.

### Mimawari Rakutaro



### Work to Preserve Coral Reefs through Business Activities

As a leader in media services, NTT Plala, Inc. has taken action to protect coral reefs, which play a vital role in the ecosystem of our oceans, by enlisting the help of its six million members.

Specifically, NTT Plala, Inc. offers tours of coral grafting to members of its Bukatsu DO! service, an online community for adults. Participants in the tour experience coral grafting with employees. NTT Plala engaged in a campaign to preserve coral reefs by donating a number of coral seedlings that matched the number of members of Hikari TV Shopping who participated in this project.

In addition, NTT Plala, Inc. produced and distributed 4K videos about the state of coral reefs and activities to protect them, creating opportunities for people to think more about protecting coral reefs. In January 2016, we began donating a portion of proceeds from people who watched the video for initiatives to protect coral reefs.

NTT Plala, Inc. will continue to protect the environment with help from its members by providing enjoyable projects linked with its business activities.

## Educational Activities by goo Green Label Information Dissemination

As an ICT company, we are increasingly expected by society to disseminate information and educational materials online. We will continue such activities through online media to convey the importance of biodiversity, and encourage a diverse range of people to engage in conservation activities.

### Activities by goo Green Label

The goo Green Label portal donates a portion of the profits generated through use of the site to organizations engaged in environmental protection and social 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. A total of 55 companies, including those in the NTT Group, have currently signed up as "Corporate Partners," a program that has been recommended for in-house use within those companies. Since its inception in August 2007, donations totaling 54.8 million yen have been made to 86 organizations, the majority of which are NPOs engaged in global environmental protection activities.

In fiscal 2015, we contributed a total of one million yen to the National Land Afforestation Organization, a public utility association, which undertakes tree-planting activities as part of revival efforts following the Great East Japan Earthquake.

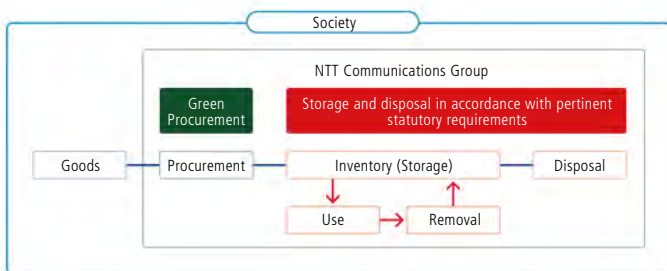


# Preventing Environmental Pollution

The NTT Communications Group is taking various steps to avoid 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, the bolstering of management, and education and training.

With regard to chemical substance management systems, in which society has shown a growing interest, 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— including the assigning of vice presidents as managers. While conducting storage inspections on a regular basis, we are thoroughly overhauling the system to implement the rapid coordination of information to include senior management under the leadership of the President in the event of an earthquake or other disaster. By means of training sessions on environmental laws, we always keep abreast of the content of law revisions, share information among all Environmental Working Groups and plan optimization of our operations in a timely manner.

## Framework for Preventing Environmental Pollution in Each Business Stage



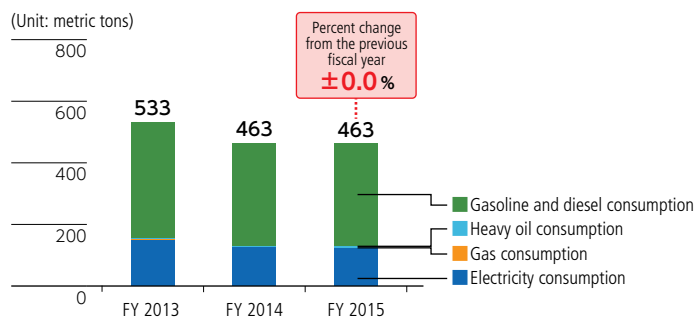
## Handling of Environmentally Hazardous Substances

### Air Pollution Countermeasures

Our business activities emit NOx and SOx, which cause air pollution. Approximately 70% of the NOx emissions are attributable to the use of gasoline and diesel in our operational vehicles, with the remaining 30% are emitted during the generation of electric power in communications buildings and other facilities. Most SOx (around 93%) is emitted during generation of the electricity we use.

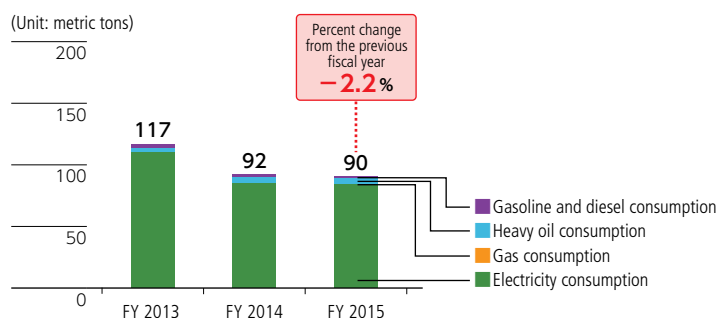
In fiscal 2015, we reduced our emissions of both NOx (by 0 tons year on year, to 463 tons) and SOx (by 0 tons to 90 tons) by 2.2% in both cases thanks to the lower levels of electric power consumed. In the years to come, we will encourage driving techniques that show consideration for the environment and review our vehicle fleet numbers while promoting the mitigation of global warming and the prevention of air pollution by taking steps to reduce electricity usage in our businesses.

## NOx Emissions



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

## SOx Emissions

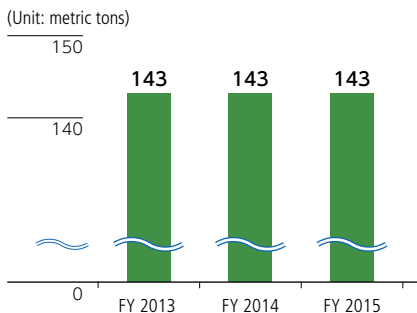


(Scope: 14 domestic companies of the NTT Communications Group)

### Ozone-Depleting Substance Countermeasures

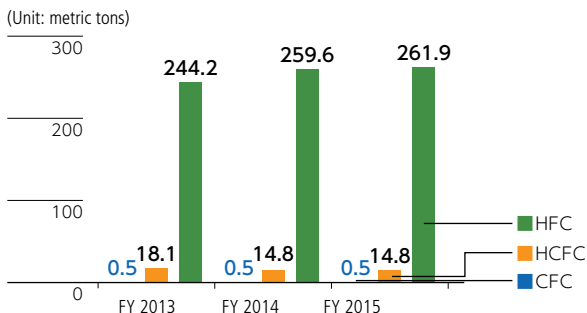
We dispose of ozone-depleting substances in an appropriate manner. The volume of specified halons used in our fire extinguishing equipment in fiscal 2015 was approximately 143 tons, roughly the same as in the previous fiscal year. Meanwhile, the volume of specified Freon gas (CFCs) used in our air-conditioning equipment in fiscal 2015 was up 2 tons from the preceding fiscal year to approximately 277 tons.

#### ■ Volume of Specified Halons Used in Fire-Extinguishing Equipment



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

#### ■ Volume of Specified CFCs Used in Air-Conditioning Systems

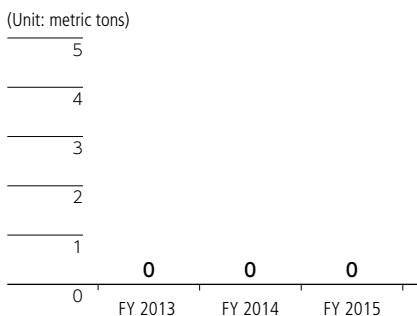


(Scope: 14 domestic companies of the NTT Communications Group)

### 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. As there were no buildings demolished in fiscal 2015, there were no asbestos emissions. 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



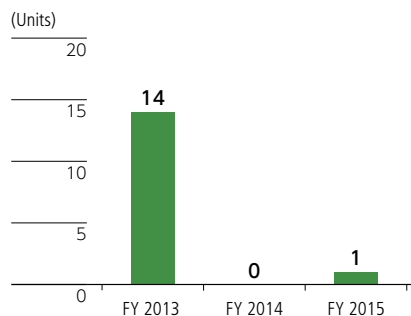
(Scope: 14 domestic companies of the NTT Communications Group)

### Storage and Management of PCB

NTT Communications appropriately manages devices that contain polychlorinated biphenyl (PCB). Such devices were used in the past as insulators for electrical facilities. As a policy for PCB storage, we have established a set of guidelines prescribing early detoxification treatment as well as methods for ascertaining conditions and management when the use of equipment containing PCBs is to be continued.

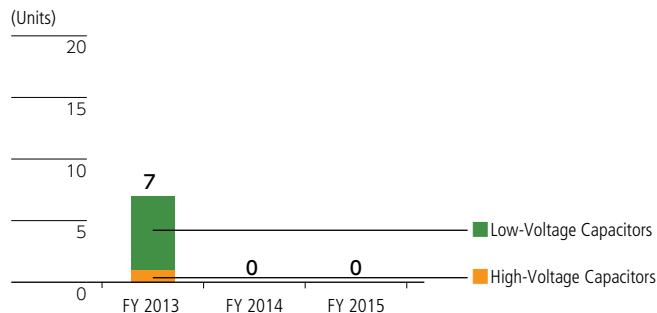
In fiscal 2014, we undertook the proper detoxification processing of 1,415 systems, comprising high-concentration PCB systems stored in Kyushu and Hokkaido and trace PCBs from all over Japan. For our currently stored high-concentration PCB systems, we are coordinating with waste disposal companies with plans to commence detoxification processing in fiscal 2016 for inventory held in Tokyo and in fiscal 2018 for systems stored in Osaka.

#### ■ Number of Transformers Stored



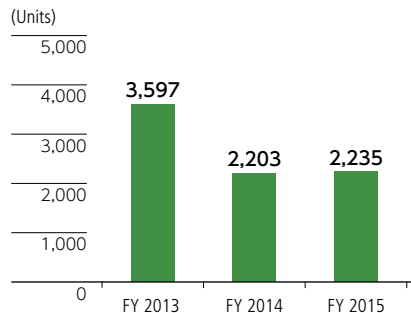
(Scope: 14 domestic companies of the NTT Communications Group)

#### ■ Number of Capacitors Stored



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

#### ■ Number of Ballasts Stored



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

## Chemical Substance Management in Anticipation of Emergency Situations

Against a backdrop of natural disasters that are occurring frequently on a global scale, in recent years society has shown a growing interest 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 establishing storage and management systems while bearing “unlikely events” in mind for some time.

In the management of pollutants and PCBs in particular, we have implemented measures that recognize 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 safely and securely.

### ■ PCB Storage Location



### ■ Storage of PCBs



## Cases of Major Leakage

There were no incidents involving major leakages in the NTT Communications Group in fiscal 2015.

## Transport, Import or Export of Toxic Waste

In line with our policy of making an early effort to conduct the detoxification processing of PCBs, in fiscal 2014 we conducted the processing of those stored in Kyushu and Hokkaido. We will process the remainder, held in Tokyo and Osaka, as soon as processing center preparations are complete. We have no plans to transport, import or export any toxic waste.



# Continuous Strengthening of Corporate Governance

Society expects companies to fulfill a wide range of responsibilities, from providing new value through products and services, to having a sincerely open corporate culture. As a leading global ICT company, the NTT Communications Group strictly enforces its business principles and other rules to ensure that each and every employee takes action with a sense of responsibility. In order to create an efficient, legally compliant, and ethical business foundation, we have updated our corporate governance and compliance systems throughout the entire Group.

## Our Core Business Principles and Guidelines

### Cornerstone Stance on Consideration for Stakeholders Stated in Our Business Principle (OBP)

Our Business Principle (OBP) is a clearly written expression of the principles that must be understood and shared by each and every employee of the NTT Communications Group.

Compliance with and the practice of OBP go hand in hand with maintaining a perspective that takes each and every stakeholder into consideration. In maintaining relationships with all our stakeholders, there are instances in which there is uncertainty about what constitutes correct judgment and behavior. For such situations, we are distributing OBP as a means for our employees to proactively refer back to the basic principles inscribed in the handbook throughout the course of their daily work and take the correct actions. Based on OBP, we are aiming to remain a company trusted by customers and society as a whole while also garnering customer satisfaction.

### ■ Stance on Consideration for Stakeholders

#### 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 partner 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.

## Guidelines for All Types of Business Activities

Society has charged us with a diverse range of responsibilities to fulfill through our operations, from the development of products and services that solve social issues, to the protection of the environment and the fostering of a corporate culture that respects openness and diversity. Our corporate activities strictly follow various guidelines set forth to continue fulfilling our promise to society in fields central to CSR.

### ■ Examples of Policies and Guidelines for Priority Areas and Priority Activities

#### Contributions to society

- Innovation that supports a networked society
  - For Global Cloud Vision, please refer to page 8
- Ensure highly reliable mission-critical infrastructure
  - For NTT Communications Three Disaster Policy Fundamentals to Address Disasters, please refer to page 9
- Creating robust network security for our customers
  - For NTT Communications Security Declaration, please refer to page 10
- Cooperating with suppliers
  - For Basis Policy on Procurement, please refer to page 12
- Social contributions and community development
  - For Social Action Principles, please refer to page 13

#### Respect for human resources

- Nurturing human resources
  - For Policy on Human Resources Development and Nine Ideal Employees, please refer to page 18
- Respect for diversity, equal opportunity and other objectives
  - For Promotion of Diversity Fundamental Policy, please refer to page 20

#### Contributions to the global environment

- Integrated Basic Philosophy
  - For NTT Communications Group Global Environmental Charter, please refer to page 24
- Preserving Biodiversity
  - For Action Guidelines with Regard to Preservation of Biodiversity, please refer to page 37

#### Continuous strengthening of corporate governance

- Respecting Human Rights
  - For Basic Policy on Human Rights Education, please refer to page 47
- Internal Controls
  - For Basic Approach for Maintaining an Internal Control System, please refer to page 48
- Information Security
  - For NTT Communications Security Declaration, please refer to page 49

Fiscal 2015 Activity Achievements

Priority Activity	Measures	Fiscal 2015 Targets		Fiscal 2015 Achievements		
		Qualitative Targets	Quantitative Target	Status of Specific Activities	Quantitative Result	Self-Assessments
Ensure information security	Continuous Privacy Mark accreditation	Continuously adhered to a PDCA cycle for personal information protection (by revising regulations, awareness, audits, etc.)	—	<ul style="list-style-type: none"> <li>Revised rules in accordance with introduction of My Number national ID system</li> <li>Revised Privacy Policy (expand the scope of shared use of personal information for employees affiliated with client corporations across the group)</li> </ul>	—	★★★
	Continuously raise awareness by implementing training programs	Reduce number of incidents by working to enhance awareness through stratified security training programs	—	<ul style="list-style-type: none"> <li>① Companywide security training/measure understanding</li> <li>② Secure programming training</li> <li>③ Training for those responsible for implementing security management/managers</li> </ul>	<ul style="list-style-type: none"> <li>① 18,629</li> <li>② 40</li> <li>③ 127</li> </ul>	★★★
	Strengthen management of processes and systems	<ul style="list-style-type: none"> <li>Conducted vulnerability assessments of new and upgraded company information systems.</li> </ul>	—	Provided vulnerability assessment environment and conducted vulnerability assessments of new and upgraded company information systems.	Number of vulnerability assessments conducted: 149 systems	★★★
		Strengthen management of processes for the safe handling of customer information	—	Throughout the year, appropriately managed application and approval systems for downloading customer information.	—	★★★
	Implement information security surveys	Implement information security surveys for targeted companies.	—	Conducted surveys of all targeted companies.	—	★★★

Self-Assessment Achievements  
 Set at Three Levels

★★★: Target achieved  
 ☆★★: Target almost achieved  
 ☆☆☆: Target only partially achieved

Stance and Achievements in Dealing with Stakeholders

By promoting dialogue with our stakeholders, we are generating opportunities to obtain invaluable input and feedback, which we in turn channel through our 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 dialogue with its stakeholders.

Examples of Communication with Stakeholders in Fiscal 2015

<b>Communication with Customers</b>	We gathered feedback from customer satisfaction (CS) surveys and took steps to improve satisfaction levels. <ul style="list-style-type: none"> <li>Voice of Customer (VOC) Survey, NTT Communications Forum</li> </ul>
<b>Communication with Business Partners</b>	We worked with our business partners to improve communications quality, thereby improving customer satisfaction with respect to quality. <ul style="list-style-type: none"> <li>Arcstar Carrier Forum (ACF), Customer Council, Partner Summit</li> </ul> We published a policy on procurement in accordance with our Guidelines for Green Procurement to ensure fair procurement activities. <ul style="list-style-type: none"> <li>Communication with suppliers</li> </ul>
<b>Communication with Society</b>	We worked to raise awareness of issues and develop a clear understanding of situations by communicating with NPOs and external experts. <ul style="list-style-type: none"> <li>Dialogue with stakeholders, various social contribution activities</li> </ul>
<b>Communication with Employees</b>	To help maintain and improve motivation among employees, we used an appropriate human resources system, provided a forum for communication with management, and made sure that employee feedback was incorporated. <ul style="list-style-type: none"> <li>Dialogue with the president</li> <li>Presentations by the president about Vision 2020</li> <li>Exchange opinions with the president over the intranet</li> <li>KAIZEN Support Line</li> <li>Conduct employee satisfaction surveys</li> </ul>

# Governance

## Corporate Governance

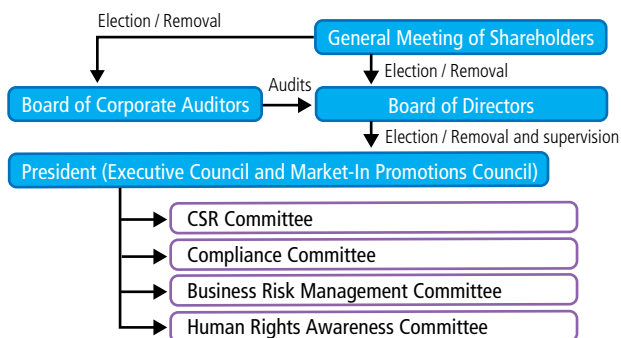
### Corporate Governance Structure

With regard to the governance structure at NTT Communications, we are employing a system that draws on our Board of Directors and our Board of Corporate Auditors and working to enhance governance functions.

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 our Board of Directors' rules.

The Board of Corporate Auditors is made up of three external auditors. In addition to attending important meetings, including those of the Board of Directors, these auditors hold meetings of the Board of Corporate Auditors and audit the execution of directors' duties. A dedicated organization and staff facilitates efficient audit operations. Maintaining close cooperation with accounting firms and other parties by periodically sharing information on audit plans and results and through similar means, the Board of Corporate Auditors is currently working to strengthen the audit structure.

#### ■ Corporate Governance Structure



### Composition of Board of Directors (as at July 2016)

Directors	Responsibility	Name
President & CEO		Tetsuya Shoji
Senior Executive Vice Presidents	In charge of technology In charge of operations In charge of information security In charge of corporate planning	Tetsuya Funabashi
	In charge of sales	Katsumi Nakata
Executive Vice Presidents	Head of Voice and Video Communication Services	Toru Maruoka
	In charge of CSR	Eiichi Tanaka
Senior Vice Presidents	NTT America, Inc. President & CEO	Kazuhiro Gomi
	Head of Fourth Sales Division	Denji Sakurai
	Head of Network Services	Takashi Ooi
	Head of Cloud Services	Masaaki Moribayashi
	Head of Third Sales Division	Ken Kusunoki
	Head of Customer Services	Hiroatsu Matsumoto
	Head of Second Sales Division	Hidemune Sugahara
	Head of West Japan Sales Division	Tetsutaro Nakamura
Senior Vice President, NTT Communications Corporate Advisor		Takanobu Maeda
Senior Vice President, NTT Communications Corporate Advisor		Akira Arima
Non-executive director		Masanori Ozawa
Standing Audit & Supervisory Board Members		Satoshi Shinoda
		Yoko Kobayashi
		Nobuhiro Takeuchi

## Reasons for Director Appointments

In appointing directors, we expect that they will utilize their extensive knowledge and awareness in each of their respective fields.

## CSR Governance

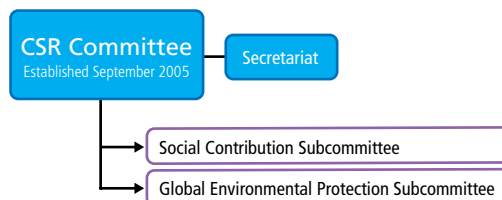
### CSR Promotion Structure

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 Subcommittee under the CSR Committee.

Meeting every year, the CSR Committee issues CSR reports, reports on CSR activities, and considers and implements measures aimed at promoting CSR activities. In fiscal 2015, representatives of 13 major Group companies attended the CSR Committee and CSR Promotion Committee meetings.

In the years to come, we will continue to work to maintain and foster CSR initiatives across the entire NTT Communications Group by holding discussions on a regular basis at CSR Committee and CSR Promotion Committee meetings.

#### ■ CSR Promotion Structure



### CSR Governance Assessment Process

For us to make the CSR activity promotion structure function steadily, we have put in place and have in continuous operation mechanisms to check on what has been achieved through those activities.

Specifically, we regularly establish CSR Indexes that serve as the main targets for each year's CSR activities. By verifying and reviewing the rate of achievement of those activities every year, we are in the position to gauge the effectiveness of our CSR governance.

Decided upon at CSR Committee meetings, the CSR Indexes are established with the CSR Committee chairman bearing the responsibility for their overall achievement. Not limited to the verification of the degree to which the indexes have been successfully achieved, the CSR Committee assesses the effectiveness of the indexes themselves. The CSR Committee meets once a year.

In fiscal 2015, we implemented a review of the CSR index framework in accordance with a reassessment of the Fundamental CSR Policy and priority issues. For fiscal 2016 onward, we will implement the PDCA cycle in our CSR activities while periodically updating our targets for each fiscal year in accordance with our medium-term targets (vision).

# Compliance

## Compliance Promotion Framework

For the NTT Communications Group, compliance goes well beyond merely adhering to laws and ordinances. Viewing compliance as possessing a high sense of ethics that enables the fulfilling of social obligations while continuing to operate a business, we are aiming to bring about the establishment of corporate ethics at a high level.

More specifically, having set up the Compliance Committee under the chairmanship of the director in charge of compliance in fiscal 2002, we established lines of responsibility by appointing directors and officials in all business units. In July 2015, to respond to the increasing complexity of compliance and globalization associated with the internationalization of the Group's business, we also formulated Global Compliance Regulations as a compliance policy to be commonly applied at Group companies in Japan and overseas. To ensure these regulations take hold, we ascertained through internal audits the state of compliance with these regulations across the Group, while top management stressed the importance of enhancing corporate ethics.

Looking to the future, 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 while adhering to high ethical standards. We will also work to enhance the world-class compliance promotion framework at the NTT Communications Group.

## Initiatives to Prevent Corruption

To prevent corruption, including bribery and bid-rigging, NTT Communications adheres to the National Public Service Ethics Code and formulates and operates guidelines, which cover the prevention of the bribery of foreign public officials, and manuals that provide advice on how to respond. Serving as a fresh reminder, the prevention of corruption forms a topic covered at compliance training sessions (see below).

## Appropriate Advertising

Society has become more critical of the moral and ethical implications of advertising style on communities. While electronic communication services via the Internet, mobile phones and other means have come to form the basis of customer lifestyles in recent years, service menus and fee structures have become more complex and diverse. We believe it necessary to make advertising more easily understandable by our customers.

To give customers peace of mind when selecting and using services, NTT Communications has been striving to ensure that its advertising is trustworthy, in keeping with its own standards and the guidelines for telecommunications service advertising established by the Council for the Promotion of Telecommunication Service Improvement.

Specifically, in November 2008, we formulated rules on advertising and have maintained a system for ensuring fairness in advertising. We aim to spread awareness of and educate our employees about the proper approach to advertising. We have set up a screening system for certain types of advertising, designated personnel for carrying out examinations, implemented these examinations, and established other procedures for ensuring compliance with the Act against Unjustifiable Premiums and Misleading Presentations.

As well as complying with laws such as the Act against Unjustifiable Premiums and Misleading Representations, NTT Communications will make further efforts to reassure customers in its advertising activities when they choose services provided by NTT Communications.

\* ICT Ecology Guideline Council: The council consists of the following four industry organizations: The Telecommunications Carriers Association, the Telecom Services Association, the Japan Internet Providers Association, and Japan Cable and Telecommunications Association.

## Awareness-Raising Programs and Training for Thorough Compliance

From the point of view of the thoroughness of legal compliance and fair business activities, companies are required to implement awareness-raising and training programs for group employees and directors on an ongoing basis. At NTT Communications, we provide annual compliance training to all employees and directors, including those at Group companies, as well as other personnel. We also actively conduct internal awareness-raising programs, including surveys on corporate ethics and a call for compliance slogan entries.

Specifically, at compliance training programs that form the foundation of common knowledge for Group employees, we confirm how we are to act by means of specific case studies in which compliance violations became a problem. In addition, we attach great importance to questionnaire surveys relating to corporate ethics, from the point of view of listening closely to frontline feedback. We aim to improve awareness of compliance based on the results of the surveys in fiscal 2015.

## Consultation Hotline

We established the NTT Communications Group Hotline, which can be accessed by Group employees in all countries.

Additionally, 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.

In fiscal 2015, the number of cases reported through these two channels that were related to the NTT Communications Group totaled 80. The Compliance Office responded appropriately to these reports based on the results of investigations of involved parties, and measures were put in place to prevent a reoccurrence as necessary.

# Respect for Human Rights

## Promoting Human Rights Education

In order to create a rich corporate culture with respect for human rights, the NTT Communications Group put in place a basic human rights education policy in July 1999 and has continued to actively promote human rights awareness ever since. We also established a Human Rights Awareness Committee, which is charged with the establishment of a corporate constitution that does not tolerate discrimination of any kind and the promotion of human rights education. Among its many duties, the Committee reports on educational activities and deliberates on promotional measures, in accordance with the NTT Group Human Rights Charter, which was newly established in 2014.

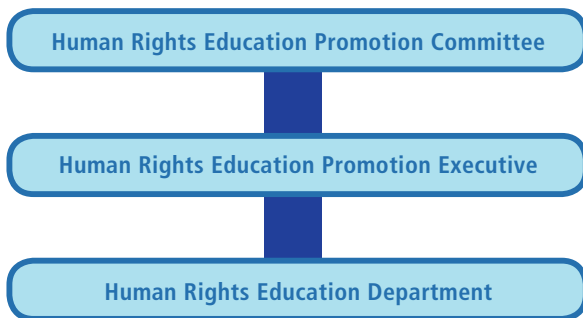
### Basic Policy on Human Rights Education

As a company that develops business on a global basis, NTT Communications places the utmost importance on solving human rights issues, including discrimination, as a part of its efforts to build a rich corporate culture that respects human rights. As we strive to maintain 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 day-to-day business activities.

### Maintaining a Business Structure That Respects Human Rights

Placing the utmost importance on human rights, we maintain a corporate constitution that does not tolerate any form of discrimination while aiming to foster bright and energetic workplaces.

### NTT Communications Group Framework for Promoting Human Rights Education



Respective responsibilities in the promotion framework

- Human Rights Education Promotion Committee: Basic Policy for NTT Communications Group initiatives, activity planning, formulation of implementation measures, etc.
- Human Rights Education Promotion Executive Committee: Specific executive functions for measures decided by the Human Rights Education Promotion Committee
- Human Rights Education Department: Administrative support duties for the Human Rights Education Promotion Committee and Human Rights Education Promotion Executive Committee and deployment of Groupwide efforts

### Measures Geared toward Raising Awareness of Human Rights

In recent years, there has been a growing chorus calling on companies to create frameworks for respecting human rights on a level of fine detail that aligns with the characteristics of their operations. The NTT Communications group is a global ICT provider that advances respect for human rights from diverse perspectives, by participating in projects where employees and temporary staff of diverse backgrounds work together, regardless of their nationality, gender, business customs, or employment status.

We have made it mandatory for all regular NTT Communications Group employees and temporary staff members to attend All-Employee Human Rights Education Training sessions designed to foster a heightened sense of awareness within each and every employee. At the training sessions in fiscal 2015, we aimed to deepen understanding of harassment and cross-cultural communication by looking at case studies of in-house consultations.

In addition to the training, every year we solicit slogans relating to human rights as well as regulatory compliance and ethics as an initiative that enables each and every employee to consider human rights issues.

In fiscal 2015, a total of 21,551 entries were submitted from 10,017 people, who were all Group employees, including employees of overseas subsidiaries, temporary staff, and employee family members.

Continuing to implement all types of this kind of educational and awareness measure, we will strive to develop workplaces that do not tolerate harassment and foster diversity and acceptance of differences, while promoting the creation of even brighter and more vibrant workplaces.

## Human Rights Consultation Helpdesk

Providing internal and external points of contact via which each and every employee can easily seek a consultation on such matters as concerns that have arisen in the workplace, the NTT Communications Group is enhancing awareness of the points of contact among its employees and temporary staff members through such means as training sessions and in-house newsletters.

We take thorough measures to ensure confidentiality of matters discussed during consultation, and the protection of rights for the person seeking consultation.

## Respect for Human Rights in Content and Services

Internationally, companies are increasingly expected to engage in business activities that inherently prevent the violation of human rights, while ensuring that the content they provide does not facilitate the violation of human rights, and that business partners in charge of providing services do not infringe on human rights. From this standpoint, we have worked with our peers in the industry to prevent individuals from posting on the web content that contains violence or pornography, for example. When selecting suppliers, we take care to procure from suppliers that engage in appropriate CSR activities.

→ Please refer to the Contributions to society section of the report for information about our child pornography countermeasures through participation in external groups.



# Risk Management

## Business Risk Management

We established the Business Risk Management Committee to develop a system and the mechanisms to enable us to better respond to the major business risk factors that may affect the operation of the entire Company.

In fiscal 2010, we redesigned our system. At that time, we had identified 25 material risk categories and listed them in our Risk Definition Report. We adopted a system to monitor the management status of material risks through audits, while separating risk-related operations and making them more efficient. Thereafter, we have continued to pick out the risks for each organization and request ongoing reviews and revisions of countermeasures. In addition to asking for voluntary evaluations of the status of organizational countermeasures from the heads of all organizations, including directors, and ensuring that no risks have been overlooked, we conduct operational audits of each organization to evaluate the status of risk-related countermeasures. In fiscal 2015, we aim to further enhance our response in light of climate change and other issues that continue to emerge. We also extend these activities to include the principal Group companies in Japan, while promoting risk management throughout the Group.

We created a system to collect accurate risk information and ensure proper decision making in response to potential major risks. If such an event were to occur, we would set up a Disaster (Accident)/Risk Response Headquarters, which would be headed by the president or a senior executive vice president, depending on the situation.

## Crisis Risk Management

In the aftermath of the Great East Japan Earthquake, there has been a dramatic rise in society's interest in crisis risk management and the corporate sector's ability to anticipate and respond at times of large-scale disasters. With a renewed awareness of 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 while working diligently to improve our management structure. In addition to ensuring strict adherence with crisis management manuals, we are raising awareness across all departments and divisions through training and a variety of other initiatives. Especially since fiscal 2013, we drew up plans for how we would respond to a pandemic based on the Act on Special Measures for Preparedness and Response against Pandemic Influenza and New Infectious Diseases. On this basis, we made progress toward the formulation of a specific business continuity plan (BCP). Aside from this, we have also drawn up and announced two other plans to fulfill our duties as a specified public institution. These are the Disaster Management Operation Plan based on the Basic Act on Disaster Control Measures and the Civil Protection Business Plan, which is based on the Law Concerning Measures to Ensure National Independence and Security in a Situation of Armed Attack.

→ Details on NTT Communications' efforts in response to natural disasters have been posted [here](#).

## Internal Controls

In accordance with the new Companies Act, which came into force in May 2006, and the May 2015 revision to that act, we have compiled a basic policy covering the maintenance of a system of internal controls for the entire NTT Group. Concurrently, as a member of the NTT Communications Group, the Board of Directors resolved to implement the measures necessary for that system. 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 for Maintaining an Internal Control System

1. In maintaining a system of internal controls with the aim of complying with laws and regulations, managing any risk from losses and carrying out proper and efficient business operations, NTT Communications takes a variety of measures to prevent and minimize loss.
2. To maintain and assess the effectiveness with regard to operational status 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. The necessary improvements are made following the assessments of the system's effectiveness.
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 U.S. Public Company Accounting Reform and Investor Protection Act (Sarbanes - Oxley Act) and Japan's Financial Instruments and Exchange Law.
4. As the chief executive officer, the president will be responsible for ensuring the development and implementation of the system of internal controls.
5. We will take all necessary steps to comply with Nippon Telegraph and Telephone Corporation's Basic Policies Concerning the Maintenance of Internal Control Systems.

## Internal Audits

We conduct standardized audits of our internal organizations and Group companies, both in Japan and overseas. Primarily implemented by our Legal and Internal Audit Department, these audits prioritize business risks and are aimed at ensuring that businesses are managed in a global, seamless manner. 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.

# In-House Information Security

## Basic Policy

Because we believe that adherence to strict security management standards will lead to security improvements that will benefit our customers, we drew up the NTT Communications Security Declaration that we use as our basic policy when conducting business.

### ■ NTT Communications Security Declaration

At NTT Communications, we believe that our most important mission is to provide our customers with services which they can use with the assurance that their critical information is being protected and to contribute to improving the security of our customers.

We view security as the single most important issue to be addressed in providing services, and we pledge to work together with our customer to provide the best in security for their needs.

To achieve this end, we do our utmost to ensure security throughout all aspects of the value chain, from the development of technologies and services to the construction and operation of systems.

As ICT professionals, all of us at NTT Communications are committed improving our capability to ensure security.

**Our customer pledge**

1. We view security as the single most important issue to be addressed in providing services, and we pledge to always do our very best to provide our customers with improved security.
2. As an ICT solution partners entrust with critical customer information, we pledge to always strive to work together with our customers to ensure their security.
3. We view our business partner and contract employees as an important part of what supports NTT Communications, and each and every one of us pledge to work together to ensure our own security.

## Protection of Customer Information and Personal Information

We operate in strict compliance with laws and regulations and the Ministry of Internal Affairs and Communications' guidelines relating to the protection of personal information. In cases where we subcontract the handling of customer personal information, in selecting subcontracting companies we select those that sufficiently meet the standards with respect to the handling of customer information and require them to operate in strict compliance with laws and regulations and the ministry guidelines. We continue to protect our customers' information and personal information so that our customers can utilize our services without worry.

## Raising of Workplace Awareness and Thorough Training

Having positioned "ensuring information security" as a key theme of the management foundation (governance) in the field of CSR activities, we are engaged in ongoing activities to incorporate this in our CSR index. Covering a wide range, these activities include strengthening the reliability of our information handling processes, acquiring and maintaining Information Security Management System (ISMS) certification as well as conducting security surveys. In particular, we have identified the raising of workplace awareness as an extremely important responsibility as an ICT company and are actively conducting education and training. As an entity that targets a safe and secure networked society, NTT Communications is accelerating the pace of its ongoing initiatives, including those at overseas Group companies.

### ■ Information Security Training Student Breakdown

Types of Training		2015 Results
Information security training (Total number)		18,796
	Companywide security training/Training to gauge degree of understanding	18,629
	Secure programming training	40
	Training for those responsible for implementing security management/managers	127

## Information Security Management Structure

We have established common information security management benchmarks and policies in Japan and overseas, in keeping with the requirements of ISO/IEC 27001, the international standard for ISMS. We are enhancing the Group's information security governance by ongoing management activities, through which we devise level improvements centered on the regular monitoring of compliance and the taking of any necessary corrective action.

Specifically, the Security Management Office under the Chief Security Officer (CSO):

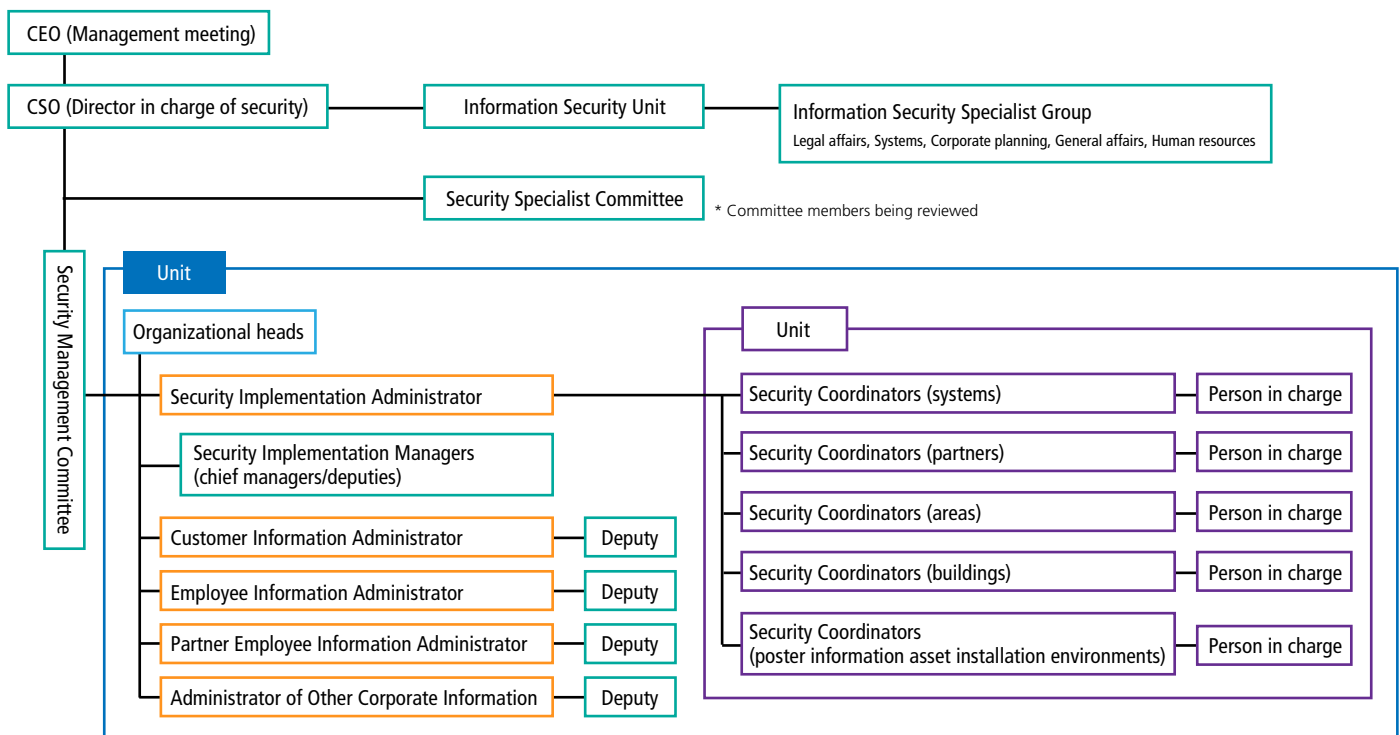
1. Formulates rules and standards and educates all employees to raise their awareness
2. Draws up and implements Companywide information security policies
3. Monitors compliance with information security regulations and takes any necessary corrective action
4. Ensures a unified response to information security incidents. Specially assigns officials in each organization to manage information security

For the major initiatives in fiscal 2015, we worked on raising the level of our security risk management. This included responding to software vulnerabilities and implementing the ongoing utilization of the WideAngle comprehensive risk-management service on systems throughout the Company. We also addressed upgrading the security issue response processes in the event of an incident by utilizing an information security management platform (ISMP)—a platform that distributes vulnerability assessment information—to conduct centralized management of company-wide IT systems.

From the viewpoint of enhanced security management, we formed the Information Security Unit as a new organization that has as its mission total information security/cyber security responses, including the functions of the Computer Security Incident Response Team (CSIRT). \* Established on October 1, 2015, the new unit will in the years to come be implementing the measures needed to enhance information security based on internal and external trends, while collaborating with information security managers positioned in each organization.

\* Monitors to see if problems have arisen in computers and networks and investigates such aspects as cause analyses and impact extent when they do and has the function of implementing response measures

### Security Management Framework



## Third-Party Assessment and Certifications

As of March 2016, 21 Group companies, comprising nine Group companies in Japan and 12 Group companies overseas, have received Information Security Management System (ISMS) certification from external organizations.

Seven companies that primarily handle personal information entrusted by customers have obtained Privacy Mark accreditation in recognition of their personal information safeguards.