

NTT Communications Group

# CSR

Corporate Social Responsibility Report 2009





The NTT Communications Group deploys a wide range of services, with its domestic and international telecommunications services at its core, and delivers business solutions around the world through information and communications technology (ICT).

## NTT Communications Corporation Corporate Information

<p>Name Address  Date established Paid-in capital  Number of employees Business</p>	<p>NTT Communications Corporation 1-1-6 Uchisaiwai-cho, Chiyoda-ku, Tokyo, Japan 100-8019  July 1, 1999 211.7 billion yen (as of March 31, 2009)  8,360 (as of March 31, 2009) Domestic and international telecommunications services</p>	<p><b>Major organizations of which NTT Communications is a member</b>  Telecommunications Carriers Association Director Japan Network Information Center (JPNIC) Trustee Japan Telecommunications Engineering and Consulting Service Board Member  The Association for Promotion of Public Local Information and Communication Board Member IPv6 Promotion Council Board Member</p>
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### Main Group Companies (as of March 31, 2009)

#### Overseas

- Americas

NTT America, Inc.  
NTT do Brazil Telecomunicações Ltda.

- Europe

NTT Europe Ltd.  
NTT Communications Russia LLC

- Asia (excl. Japan) / Oceania

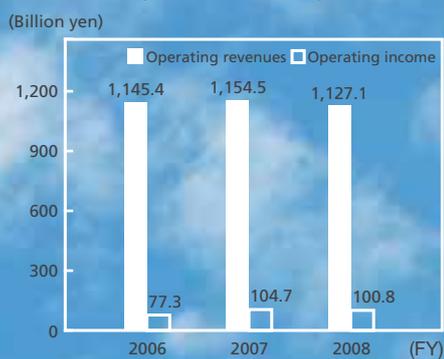
HKNet Company Ltd.  
NTT Australia Pty. Ltd.  
NTT Com Asia Ltd.  
NTT Communications (Thailand) Co., Ltd.  
NTT Communications (Vietnam) Ltd.  
NTT Korea Co., Ltd.  
NTT MSC Sdn. Bhd.  
NTT Singapore Pte. Ltd.  
Shanghai NTT Telecommunications Engineering Co., Ltd.  
NTT Communications China Co., Ltd.  
NTT Taiwan Ltd.  
NTT Communications India Private Ltd.  
PT. NTT Indonesia

#### Japan

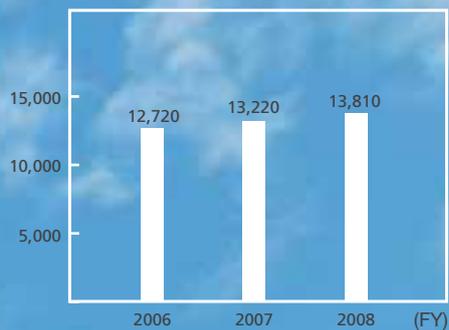
NTT Resonant Inc.  
NTT Plala Inc.  
NTT Worldwide Telecommunications Corporation  
NTTPC Communications, Inc.  
NTT BizLink, Inc.  
NTT World Engineering Marine Corporation  
NTT Visual Communications System Inc.  
NTT Com CHEO Corporation  
NTT NaviSpace Corporation  
NTT FANET SYSTEMS Corporation  
NTT Com Technology Corporation  
Digital Forest Inc.

(Among 54 consolidated subsidiaries of NTT Communications, only major subsidiaries are noted above.)

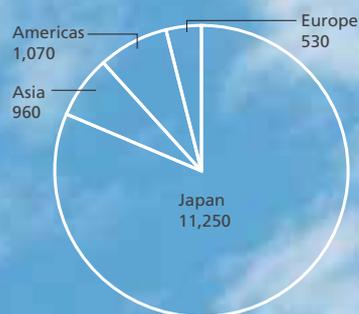
Operating Revenues and Operating Income (Non-consolidated)



Number of Employees (Group-wide)



Number of Employees by Region (Group-wide)



## Internet Business

### Supporting Essential Internet Environments for Lifestyles and Business

The NTT Communications Group provides ubiquitous, state-of-the-art broadband environments through comprehensive provision of upper-layer services, which are the more familiar forms of ICT. We carry out one-stop operation of high-quality services via the Internet under the "CreativE-Life' for Everyone" concept. These include Internet access services such as OCN and Plala, IP telephony, and music and video content distribution. Through ongoing enhancements, we will always strive to deliver services ever more attractive to the customer, contributing to their safety and peace of mind by making home and business environments more comfortable and enjoyable.



## Corporate Business

### Addressing Customers Business Challenges Through Consulting-Based Solutions

The advance of an information-oriented society and globalization of business are creating increasingly diverse business challenges for customers, including cost reductions, productivity improvements and business continuity planning. The NTT Communications Group aims to be an ICT solutions partner offering ongoing support for customers in a wide range of industries in the form of trust and security, managing their ICT-related operations through high value-added solutions tailored to their individual needs. To create services that allow customers to enhance their competitiveness, we offer support with our state-of-the-art ICT solutions, employing network and server infrastructure, as well as fixed-mobile convergence (FMC)\* and data centers.

\* Value-added services merging fixed and mobile communications. They provide environments for seamless communications through dual use of in-house corporate networks and mobile services.



## Global Business

### Connecting the World through Japanese Quality

We support customers in their construction and operation of global ICT environments through overseas bases in 52 cities in 22 countries and regions (as of the end of August, 2009). As one of the world's top Global Tier 1\* providers, we deliver Internet services of the highest quality and safeguard our customers' networks through one-stop maintenance and monitoring around the clock, 365 days a year. We will continue to contribute to the global business of customers through world-recognized "Japanese quality."

\* A Global Tier 1 is an Internet service provider (ISP) that can control its own broad-bandwidth global IP backbone without relying on upstream providers.



## Editorial Policy

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

The 2009 report is a further improvement on the booklet/online two-format composition introduced in the 2008 report. By interlinking the two media formats, taking advantage of each format's particular characteristics, we are aiming to provide a sincere, effective and exhaustive account of CSR activity as a whole.

### • Methodology for Choosing Key Information for Report

We used the following two-stage process to choose information that is important for the Group, society, and other stakeholders, referring to the materiality requirements of Version 3 of the Global Reporting Initiative's Sustainability Reporting Guidelines.

We augmented the themes of the 2008 report with content required under the Global Reporting Initiative's Application Level B, and the disclosure approaches of other telecommunications companies. We referred to the Committee draft of the ISO 26000 Social Responsibility guidelines to ensure completeness.

We tested the importance of the above areas in terms of the six assessment items below, presenting particularly important information in the printed report as special features and continuing to disclose other issues on our website to ensure completeness.

### Booklet Version

The booklet version introduces the NTT Communications Group's basic approach to CSR and key CSR activity themes in a format that members of the general public will find easy to read and understand. The booklet also provides a list of CSR indices for an overall picture of the Group's CSR activities, which leads readers who need further information to the online version.

### Online Version

In addition to information contained in the booklet, the online version also contains information on specific initiatives relating to financial, environmental and social performance, which are areas important to our stakeholders. An emphasis has been placed on full coverage, providing verification of the CSR activities implemented.

 The report and the online version can be viewed at the following URL:

[http://www.ntt.com/csr\\_e/report2009/index.html](http://www.ntt.com/csr_e/report2009/index.html)

### Materiality Assessment Issues

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

## Report Profile

### • Reference Guidelines



Global Reporting Initiative (GRI)  
Version 3.0 of the GRI's Sustainability Reporting Guidelines  
Application level: Self-Declared B

The Ministry of the Environment's Environmental Reporting Guidelines (Fiscal Year 2007 Version) and Environmental Accounting Guidelines 2005

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

### • Third-Party Opinion

Each year we have an independent expert provide an opinion to help us improve our CSR activities. Following on from 2007 and 2008, Mariko Kawaguchi, General Manager at the Management Strategy Research Department of Daiwa Institute of Research Ltd., kindly provided her opinion again in 2009.

### Report Scope

This publication presents the CSR activities of NTT Communications and 54 Group companies based on the Group's basic CSR Policy. It also includes specific information on individual Group companies. The report also contains information on green and CSR-based purchasing in businesses outside the above scope in line with management's recognition of the significant impact of supply chain activities on society and the environment.

### Period Covered

April 1, 2008, through March 31, 2009  
(although some content may be outside that timeframe)

### Issue Dates

This report: November 2009  
Previous edition: December 2008  
Next report: November 2010

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# ICT Solution Partner to "bridge" the

## Mission of the NTT Communications Group

This year marks the tenth anniversary of NTT Communications. Since its founding in 1999, the Group has gone beyond being a conventional fixed-line telephone business in its efforts to expand into the global, IP and solutions businesses, and as of the present it has developed its services to establish seven core business domains.

The business which we are involved in, telecommunications services, also known as information and communications technology (ICT), is indispensable to the world today as a social lifeline that supports economic development as well as people's everyday lives. Due to the role that we play in this, we wish to prioritize our basic mission of seeking to "bridge" and "continue to bridge" as well as to continue winning trust as a Group by providing new added value to society at all times.

## Contributing to Society with ICT

The environment facing ICT is continuing to undergo drastic change. Society is presently in the midst of an unprecedented global financial crisis, and the telecommunications industry to which we belong is also currently in the eye of this storm. Amidst all of this, the role that ICT is expected to play is growing increasingly important.

One example is the accelerating globalization of business. In the manufacturing industry of today, the competitiveness of corporations is influenced by the qualitative elements of global operations—procuring optimal parts from around the world, and producing and launching the end product onto the market.

This is supported by a high-quality global network. By maintaining bases within 52 cities in 22 countries and regions (as of the end of August, 2009) we are currently providing a structure that supports global corporations. We can prevent disruptions and rapidly restore services by bypassing certain communication paths even when cables are down due to disasters and other factors. I believe that our mission is to support the business and lives of people everywhere by continuing to connect such Managed Quality Operation with Japanese quality.

I also feel that NTT Communications should take the lead in showing the world that GDP-enhancing national development is possible despite a low

birthrate and aging society by making use of Japan's high productivity and quality in ICT. One example of this is to make use of diverse human resources.

Without a doubt there are many women, men and elderly people engaged in child rearing who would like to utilize their skills if they had a means of doing so. I believe that if they were able to work from home such potential skills could be used for society as well as helping to solve the issues of low birthrate and aging confronting it.

In that respect, using ICT is indispensable in improving the productivity and establishing the diverse working styles of individuals. For example, "Biz Communicator" provided by NTT Communications employs IP phones and teleconferencing, enabling you to see the face of the person you are speaking to on the computer. Furthermore, so long as you are in an environment permitting Internet use, it allows you to work in an environment that approximates an office while maintaining high levels of security even when at home or on an overseas business trip. I believe that providing a ubiquitous environment of this kind allows companies not only to improve the productivity of their employees, but also to make use of human resources while respecting individual working styles.

## Protecting the Natural Environment with ICT

ICT is also effective for solving environmental and energy-related issues currently people facing on a global level.

Using teleconferencing and video conferencing as alternatives to meetings that conventionally required business trips enables us not only to cut costs, but also to reduce CO<sub>2</sub> emissions produced by vehicles that accompany the transporting of people. Furthermore, advancing the introduction of teleworking, whereby people work from home, is also expected to curtail CO<sub>2</sub> emissions not only in terms of emissions involved in transporting people, but also by easing traffic congestion. We hope to work toward reducing CO<sub>2</sub> emissions by 40% or more compared to conventional levels through the constant provision of cutting-edge services, including the aforementioned "Biz Communicator," as well as video conferencing system services employing high-quality IP technology.

As part of our initiatives within the Group, we are promoting low energy consumption for telecommunications facilities and data centers,

# Present and a Sustainable Future Society

including the introduction of direct current power supplies. In our data centers, we are reducing electrical consumption by 4% compared to conventional levels when ventilating rooms by introducing and operating an efficient air conditioning system that carefully manages temperature by means of heat sensors.

And as a solution for our clients' facilities, we provide "Green Hosting Services." This aims to effectively employ resources and achieve a 20% reduction in CO<sub>2</sub> emissions by implementing virtualization technologies.

## Training Human Resources that Support CSR

Employing ICT to provide society with cutting-edge solutions, we wish to continue setting the pace in our Group activities as well. In order to do so, we need to thoroughly implement our philosophy of prioritizing the frontlines and earnestly face all of our stakeholders, including our clients. As well as fostering experience gained in the frontlines, I would like to train professional human resources capable of creating new value that can find solutions to the issues confronting our clients and society.

While establishing the goal of forming a recycling-based society that makes use of "forest – rivers (rice paddies) – oceans" and "natural power," we hope to find solutions to both environmental and food shortage issues. While the Chichibu Rice Terrace Revitalization Project is but a small step towards achieving this, it was launched with such a concept in mind. The experience of learning from the frontlines leads to the creation of solutions. The stance that we adopt towards either our customers or nature is the same.

We will unite as a Group to continue providing value that is of benefit to society as an ICT solutions partner. I hope to receive the candid views of all our stakeholders regarding our activities.



Hiromi Wasai  
President and CEO

NTT Communications Corporation



# NTT Communications

The NTT Communications Group established its Basic CSR Policy in June 2006. All efforts pursued by

## Basic CSR Policy

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



### Contributing to Society

We strive to improve our information and communications technologies and provide stable, reliable, and secure communications worldwide, thereby making society safer and more secure. We offer new business models and lifestyles that create new value by enabling people to participate fully in society.

### Protecting the Environment

We safeguard the environment in all our businesses and reduce society's environmental footprint through our telecommunications services.

### Respecting Our Employees

We respect employee diversity and provide workplaces that champion self-fulfillment. We and our partners maintain high ethical standards in meeting our social responsibilities as telecommunications professionals.

NTT Communications established its Basic CSR Policy in keeping with the NTT Group CSR Charter.



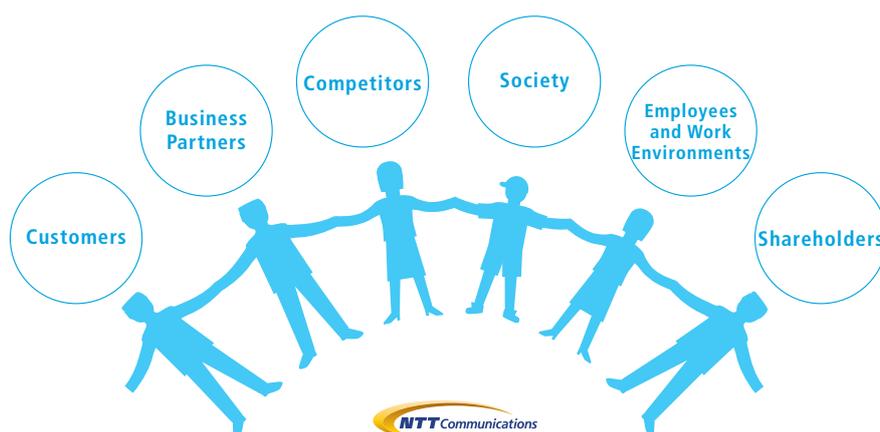
You can access the NTT Group CSR Charter at the following website: [http://www.ntt.co.jp/csr\\_e/csr\\_policy.html](http://www.ntt.co.jp/csr_e/csr_policy.html)

# Group CSR

employees in line with this policy as part of day-to-day business constitute CSR activity.

## Our Guiding Principles

The NTT Communications Group implements CSR activity based on a set of “guiding principles” stipulating considerations we shall make, as a partner bridging present and future potential and creating new communication value, toward customers, business partners, employees and shareholders, and even competitors and society as a whole, which are also influenced by our business activities. As a partner connecting people to the future and to new worlds, we will continue to strive through business, together with all our stakeholders, toward sustainable development of society in keeping with our Basic CSR Policy.



### Pledge to Customers

1. We will provide solutions and services that will truly benefit customers by understanding their needs, rather than taking our current products and services for granted.
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 long-term customer trust.
4. We will never betray the trust of our customers.

### Pledge to Society

1. We will provide secure and innovative services that contribute to the sound growth of the Internet.
2. We will cherish communications with society.
3. We will understand and respect the cultures and customs of different nations.
4. We will contribute to the development of society and environmental protection.

### Pledge to Business Partners

1. We will fully utilize the partnerships we have formed to maximize value for our customers.
2. We will select our business partners fairly.
3. We will build partner relationships that generate optimal results.
4. We will operate with integrity while providing value to our customers.

### Employee and Work Environment Pledge

1. We will ensure all employees possess a sense of responsibility as ICT professionals.
2. We will recognize individuality and diversity, and protect human rights.
3. We will trust and respect each other and create an environment that is conducive to personal development and self-fulfillment.
4. We will implement programs to reform our operations.
5. We will do our utmost to maintain security as an ICT company.
6. We will create dynamic workplaces.

### Pledge to Competitors

1. We will abide by the rules of competition and carry out business in a fair and sincere manner.
2. We will further strengthen our own competitiveness by competing fairly.

### Pledge to Shareholders

1. We will disclose operating results fairly, accurately, and in a timely manner. (We disclosed quarterly results in fiscal 2008)
2. We will accurately convey our medium- to long-term visions and strategies. (We presented these during two results announcements in fiscal 2008)
3. We will achieve sustainable growth as a company and seek higher benefits for our shareholders.
4. We will not tolerate the misuse of information relating to our business activities which leads to shareholders' loss of profits.

## 1

# Bridging the World with Japanese Quality

NTT Communications supports world-leading enterprises operating on the global stage through its seamless, high-speed networks and ICT solutions.

## Offering Total Solutions to Seamlessly Bridge Japanese and International Locations

At the time of its inception, NTT Communications was primarily a domestic long-distance telecommunications carrier in Japan and was just embarking into the international communications market. Since then we have been striving to build brand-new information platforms, a world-wide network infrastructure, and relationships with other carriers, aiming to deliver seamless and comprehensive solutions in both domestic and international markets. Today we are a global carrier offering telecommunications services throughout the world, connecting the Americas, Asia-Pacific and Europe through our networks. In addition to the network services for multi-national customers, as a global Tier 1<sup>1</sup> provider we also provide IP network services which support the Internet.

The true value that NTT Communications offers is in sustaining the business growth of customers operating on a global scale by providing stable and high-quality ICT infrastructure regardless of the business location.

In order to achieve our aim to assist every customer's varied requirements, NTT Communications offers Total ICT

solution services. Major examples of such services include hosting and management services to host customers' ICT systems at our data centers in 29 major business locations<sup>2</sup> worldwide, ICT system design, configuration, operation, and consulting services regarding information security and business continuity planning.

We are committed to expanding our solutions and ICT infrastructure to help resolve customers' business challenges.

<sup>1</sup> A Global Tier 1 is an Internet service provider (ISP) group that can control its own broad-bandwidth global IP backbone without relying on upstream providers.

<sup>2</sup> As of the end of August, 2009

## Connecting 159 Countries and Regions with Global Network Services

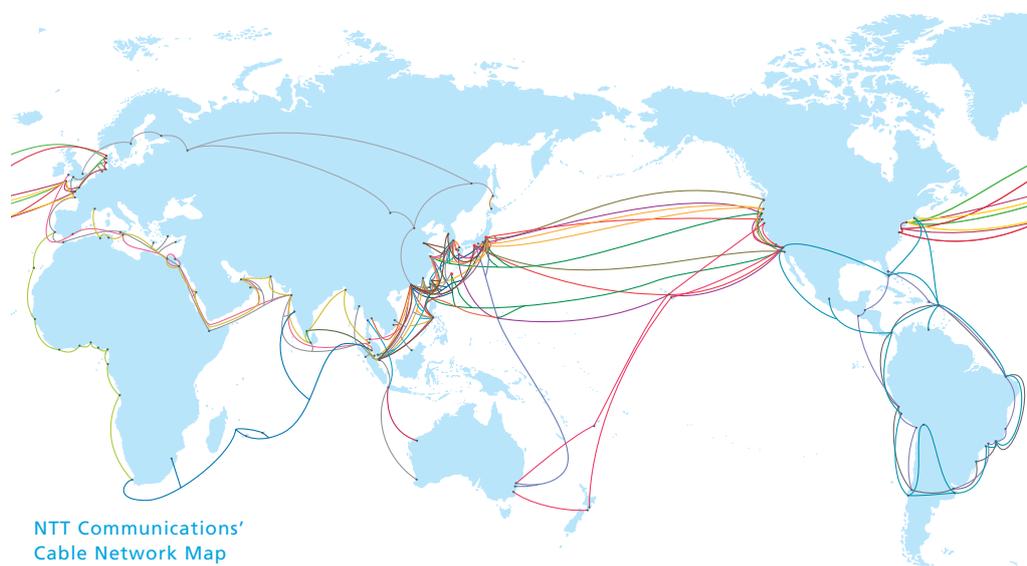
NTT Communications maintains and enhances reliability of its services, connecting countries in the Asia-Pacific region with each other via multiple undersea cables, with Japan as the hub. We also offer a Russian route cable that connects Japan and Europe at the shortest distance, thus meeting customers' needs for minimal network latency. These backbone cables have allowed us to expand our "Arcstar Global IP-VPN Services" (global data network services for enterprise customers) to 159 countries and regions. The service

coverage continues to grow, and we stand ready to respond to the needs and expectations of our customers – Japanese companies doing business globally and multi-national companies deploying their key business functions in Japan.

International communications traffic has been rapidly expanding but our networks are highly trusted. For example, whereas the bandwidth for transmissions between the United States and Japan in 2002 was 10Gbps, the capacity now exceeds 200Gbps, a twenty-fold increase to accommodate the jump in demand. Beyond telecommunications network services for enterprises, our global IP network services have become a foundation for Internet services, and we are



leading Japanese and other Asian ISPs as one of the leading global Tier 1 providers in the world. Our state-of-the-art services include direct access to our IP backbone, access to the largest IP network in Asia and an IPv4/IPv6 dual service.



## Harnessing Japanese Quality on the Global Stage

Our original intention to offer a global network was to support Japanese enterprises operating overseas. As time went by, non-Japanese enterprises also saw the quality, reliability, as well as global accessibility and coverage of our network, resulting in almost half of our global network service customers now being non-Japanese. Furthermore, the needs and requirements of our non-Japanese customers have extended beyond Japan – at the beginning they required networking between the US headquarters and subsidiaries/partners in Japan, but now they require networking between various other locations, such as the US headquarters and a data-center in Singapore, for example.

Japanese and non-Japanese customers choose our networks due to high quality in three areas. The first area is in our operation. Our Network Operation Centers in Tokyo, New York and London collaboratively manage and monitor all our networks and traffic, 24 hours a day, 365 days a year, predict and prevent problems before they occur, and keep the networks up and running seamlessly between Japanese and international locations at all times. Network throughput and reliability is the second area of quality. Possessing one of the largest IP backbones in the Asia-Pacific region enables us to provide a large-capacity, high-speed service with few delays, while the use of multiple cables makes our service highly reliable. Finally, we offer quality in terms of response to disasters or service failures. In addition to automatic and instantaneous rerouting in the event of trunk failures, we have systems and processes in place to restore our services at a minimum delay after disasters.

One case example is the December 2006 earthquake in Taiwan. When services were disrupted due to the severing of international cables connected to Japan and the United States, our customers were able to resume communications within days of the earthquake after connections were swiftly rerouted via China and Hong Kong. Such flexibility has earned NTT Communications high praise, pointing to the high level of quality and reliability of our services.

## Future Challenges and Outlook

In the world of global networking, advanced international finance transactions, such as derivative trading, require a high degree of security and minimal delays. Also, high-volume/real-time video delivery services, such as live broadcasts of concerts or sporting events, demand networks with higher speeds and broader bandwidths.

To meet those needs, NTT Communications ensures that it constantly enhances its network backbone and maintains a high level of quality in operations. By working together as one, we are committed to building a higher speed, stress-free global network.

The NTT Communications Group is supporting the future of the global networking society by keeping the world connected.

### Foreign Enterprises Value Japanese Quality Too Staff Comment



#### Koki Ejiri

Assistant Manager  
Fiber Network Services Global NW Solutions  
Integrated Network Department  
Network Business Division

Japanese enterprises used to be the main customers of our services. Since NTT Communications fully entered the global business, we have had more opportunities to bid for global projects. Interaction with foreign-owned enterprises, with whom we have had no previous dealings, has increased and now such customer orders constitute around half of our business. I view this as evidence of the high level of quality that we offer. Competition is fierce and meeting customer requirements is tough, but it is very pleasing and highly satisfying to be chosen on our quality by not only Japanese customers, but also non-Japanese customers as well.

## 2

# Disaster Preparedness to Ensure Continued Connection

NTT Communications' job is to deliver reliable communications services to customers and make sure society "stays connected." We are making efforts to ensure business continuity in times of unforeseen events such as natural disasters and accidents.

## Our Responsibility for the "Lifelines" of an Information-Driven Society

The NTT Communications Group has a social duty to consistently deliver reliable communications services to customers and to secure the "lifelines" of a sophisticated information-driven society. Acknowledging that inability to continue our own operations in times of disaster or other emergencies will disrupt also customers' operations, we consider business continuity planning (BCP) a priority for management and have worked systematically to build up a risk management framework.

In fiscal 2006, we established the Business Risk Management Committee to consider countermeasures to the various risks faced by corporations. The Risk Management Office within the Network Business Division has played a central role in tackling the operational risks envisaged in the event of a disaster, accident, terrorist attack or other emergency. Over the last few years, we have been focusing on an area which demands urgent attention—preparedness for emergencies such as an earthquake with an epicenter in Tokyo or its environs and an influenza pandemic.

## Preparedness for an Earthquake with an Epicenter in the Tokyo Area

There is apparently a 70% chance of a large earthquake striking Tokyo or its environs within the next thirty years. The Risk Management Office is preparing for such an unprecedented calamity, deploying measures in line with three basic policies: improve network reliability; secure vital communications; and restore services quickly.

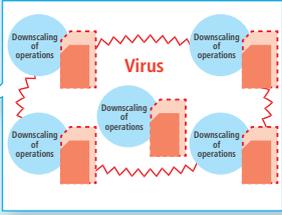
We are bolstering readiness with reliability improvements, especially through facility enhancements and redundancy achieved by establishing alternative trunk routes or by duplicating or decentralizing telecommunications facilities. We have thus managed to dramatically decrease the risk of network disruption due to earthquake damage. Disruption to internal phone connections, Internet access, mail servers and other communication tools, which are vital for maintaining information channels in times of disaster even from the customer's perspective, has been mitigated through redundancy.

In the event of an actual earthquake, first an Initial Response Headquarters will be set up in the Kansai region. This will serve as a base for gathering and disseminating information on damages incurred. In the Tokyo area, employees belonging to the Disaster Response Headquarters will gather from offices or homes and set up a Tokyo Area Response Headquarters, preferably within 24 hours of the earthquake. After establishment, the headquarters will set about restoring disrupted networks according to a predetermined order of precedence.

Preparedness also requires measures for ensuring the safety of employees. Measures implemented include the introduction of a safety confirmation system to enable swift and reliable confirmation of the safety of employees and their families in times of emergency, drills requiring employees to walk home from work, and distribution of packages containing food and emergency supplies.



## Preparedness for Main Types of Disaster

	Large earthquake with an epicenter in the Tokyo area	Avian Influenza A (H5N1)
Damage Envisaged (Japan)	<p>Magnitude (Japanese scale): 7.3                      Fatalities: 11,000                      People unable to return home: 6.5 million</p> <p>(Source: Damage estimates for an earthquake with an epicenter in the Tokyo area; Cabinet Office, Government of Japan)</p>	<p>Infections: 32 million                      Hospitalizations: 2 million                      Fatalities: 640,000</p> <p>(Source: Pandemic Influenza Preparedness Action Plan of the Japanese Government; Ministry of Health, Labour and Welfare)</p>
Response Style	<p><b>Resource concentration— Restoration of operations</b></p> <p>Concentrate human and other resources in the earthquake zone and set about quick restoration of facilities and services.</p> 	<p><b>Resource minimization— Downscaling of operations</b></p> <p>As the virus would be expected to spread across Japan in virtually one sweep, implement a nationwide plan to downscale operations based on information from the government (WHO, etc.).</p> 
Basic Action	<ul style="list-style-type: none"> <li>• <b>Disaster Response HQ personnel</b> <ul style="list-style-type: none"> <li>• Daytime: Go from offices to Disaster Response HQ</li> <li>• Nighttime: Go from homes to Disaster Response HQ</li> <li>* Establishment of Temporary Response HQ in Kansai</li> </ul> </li> <li>• <b>Restoration teams</b> <ul style="list-style-type: none"> <li>• Implement initial response according to action plans for each team</li> </ul> </li> <li>• <b>Regular employees</b> <ul style="list-style-type: none"> <li>• Walk home having identified safe routes and stay home</li> <li>• Return to work when restoration of lifelines allows and engage in restoration activities</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Response HQ personnel</b> <ul style="list-style-type: none"> <li>• Secretariat convenes a meeting of Response HQ personnel based on receipt of information from the government (WHO, etc.)</li> </ul> </li> <li>• <b>Business continuation teams</b> <ul style="list-style-type: none"> <li>• Continue business, focusing on only core tasks</li> <li>• Secure the minimum personnel requirement and prevent infection for those personnel (vaccine priority, etc.)</li> </ul> </li> <li>• <b>Regular employees</b> <ul style="list-style-type: none"> <li>• Thorough infection prevention (masks, mouth-rinsing, disinfection, etc.); work from home</li> </ul> </li> </ul>
Ultimate Goal	Follow action plans, delivering human assistance from areas outside the earthquake zone and carry out measures aimed at full restoration of services	Ensure business continuity beyond the pandemic phase, reducing or increasing personnel depending on the influenza cycle, which is said to continue for almost a year.

## Preparedness for an Influenza Pandemic

NTT Communications has picked up on issues raised by the Business Risk Management Committee and has been working, since fiscal 2007, to bolster readiness for an influenza pandemic. This has involved the stocking of masks, disinfectant and other supplies, and the implementation of in-house awareness activities and pandemic drills.

In the event of a pandemic, it will be of utmost importance to communicate correct information to employees. We have therefore put in place methods enabling communication between company and employees, launching a "Pandemic Web" which employees can access from home. When urgent notices are posted, employees will be notified by email. This system was used during the H1N1 influenza outbreak in the spring of 2009 to instruct employees to take precautions against infection and to communicate the extent of infection. We are drawing on this experience in order to bolster preparedness for a potential epidemic from autumn.

We have also prepared a nationwide business continuity

plan to apply in the event of a pandemic escalating due, for example, to an increase in virulence. During phases in which there is widespread infection, members of business continuation teams will go to work after taking due precautions against infection, for example by checking their physical health prior to departure for work and commuting during non-peak hours. Other employees will be asked to work from home using remote tools to avoid the risk of infection during the commute. We will soon be distributing remote tools and look to make further efforts to improve environments for working from home.

## Future Challenges and Outlook

The scope of risks posing a threat to communications is constantly widening in line with changing social conditions. An example is the emergence of cyber attacks. Thus the most pressing issue in business continuity planning is the establishment of a flexible framework for responding to the various risk scenarios.

We will also be looking to establish response manuals and conduct awareness activities to ensure that employees will be able to act in a composed manner in times of emergency.

Staff Comment



**Tsutomu Hosokai**

Manager  
General Affairs Department

When the influenza epidemic broke out at the beginning of this year, I personally felt real fear knowing that "unexpected events" were occurring. At the same time, I realized that the ability to take proper action would depend upon whether or not we had access to basic information. I want to ensure that we can carry on providing valuable information based on an understanding that the safety of employees is of utmost importance.



**Tatsuo Okada**

Manager  
Network Systems Engineering  
Integrated Network Department  
Network Business Division

When a disaster occurs, the company has to be able to move fast so we can make progress on goals such as restoring services. It all comes down to not what we do when it occurs, but what we did before it occurred. In a sense, you could say our response is finished once the disaster strikes. I believe it is vital to determine exactly what preparations need to be made through cooperation with related organizations.

# London

## Jin Zhu

Manager, NTTWT Data Centre Product,  
NTT Europe Ltd.

## Nicholas Leishman

Manager, NTT Europe Data Centre,  
NTT Europe Ltd.  
Data Centre (Slough)

### Pursuing Green Data Center operations powered totally by renewable energy

Customers often demand high powered facilities, possibly due to the popularization of blade servers and progress with virtual server technology. As the facility power increases, more energy is essential for cooling. Therefore, our engineers examine not only power capacity but also the layout of the facilities, including hot/cold aisle design. So the most suitable options are always made available to improve energy efficiency.

Our LD4 data center, in the suburbs of London, is truly a green data center powered 100% by biomass energy sourced from a local renewable energy station. We will continue to implement other such advanced practices.

Photo:  
Nicholas Leishman



# Hong Kong

## Steven So

Manager, Solution & Product,  
New Business Division, NTTCom Asia Ltd.  
Data Center (Taipei)

### Life Cycle Management focused on the improvement of facilities' efficiency

Customers' demand for Green ICT policy has become so hot. On the other hand, customers always ask for excessive power more than necessary. In order to keep an optimum balance between capacity, availability and efficiency, we manage our facilities from a Life Cycle perspective focusing in these factors from planning, design, operation to improvement. Our green ICT approach is to maximize resource utilization, adopt energy efficient equipment, and upkeeping equipment performance. We will continue to provide highly reliable services while at the same time we are committed to pursuing energy efficiency.

Special  
Feature

# 3

## Global challenge for the climate change, measures taken by NTT Communications Group

Recently, energy consumption at data centers has been increasing along with the increasing demand for data center business. To name few examples, four major approaches are featured here to represent the NTT Communications Group's Green Data Center service which offers not only secure and reliable services, but also environmentally friendly services to our clients worldwide.

# Tokyo

## Toshihiro Takeda

Integrated Network Department  
Network Business Division  
NTT Communications Corporation

### Comprehensive environmental consideration put into practice from building to operation.

TPR (Total Power Revolution) is set as our principal approach to tackle the global warming issues. We make every effort to improve energy usage efficiency at ICT and data center facilities. Regardless to mention the latest technology, we encompass a wide range of measures right from the building stage, including Green wall.

Besides environmentally friendly facilities, electricity procurement is another important issue. Since May 2009, solar panels have been installed for operation at the Data Center in Tokyo. We are committed to promoting clean energy procurement and advanced system installation for all data centers.



# New York

## Randy Preble

Vice President, Finance and Business Operations  
Enterprise Solutions  
NTT America, Inc.  
Data Center (Lundy, Sterling)

### Towards the ultimate objective to improve PUE to meet all customers' requests.

To become a solution partner, our Green Initiative plays a vital role in competition.

Customers look on our approaches to green data centers and especially our PUE ratings. By introducing a variety of green technology including Air Curtain and Return Ducting, we have reduced our PUE from 1.95 to 1.8 and CO2 emissions by 6,800t. We try to optimize the existing data center functions with new energy savings solutions in a cost effective and safe manner. We offset our ICT infrastructure's carbon footprint through the use of carbon offsets. Besides carbon offsets, we continue to offer wide ranges of solutions to tackle global warming.

## Data center energy consumption region by region

Since FY2008, NTT Worldwide Telecommunications Corporation, in charge of the group's entire global data center operations, has established a power usage management program in all data center business locations. As a step forward, we will place effective practices through measures such as sharing advanced practices in each area and so forth.

Business Area	Electric power consumption (average per month)
Europe	233 (kWh)
USA	7,516 (kWh)
Asia	14 (kWh)
	708 (kVA)
Japan	18,934,420 (kWh)

\* Due to the data availability in each area, data in Asia is presented in kVA.  
NTT WT manages data for the following 9 data centers:  
[Europe] Slough, Saint Denis  
[USA] Sterling, Lundy, Ashburn, Santa Clara  
[Asia] Taipo, Tai Seng, Cyberjaya2

## 4

# Developing Human Resources to Meet the Needs of Customers

Human resources development at NTT Communications centers on practical experience and teamwork. We want employees to carry out operations of the company using skills they have developed through frontline experience.

## Shifting the Focus of HR Development from the Individual to the Team

Internet usage had been experiencing exponential growth in 1999, the year NTT Communications was established, and individual employees urgently had to acquire skills and knowledge of a high standard in order to meet that demand. To develop IP personnel with Internet skills and knowledge of the required standard, we arranged around 850 different courses and encouraged employees to take them. We also focused on nurturing specialists.

Employees were highly motivated toward acquiring qualifications, and by the end of fiscal 2002, we were employing more than 5,100 skilled IP personnel.

The market matured quickly, however, and there emerged a need for integrated products combining a number of different services. Consequently, our focus on individual specialties in human resource development and administration of the organization was no longer consistent with the needs of the market. Another concern was the draining of skills due to outsourcing of operations.

In 2005, we sought to resolve these issues by shifting the focus of human resource development away from "individuals" and on to "teams." We even settled on a new image for the "ideal employee"—someone possessing both skills in the Frontline Empowerment and Character Quality. Human resources fitting the description of the "ideal employee" were defined as "professionals."

## A Framework for Developing "Professionals"

We define "professionals" as people who have acquired specialist knowledge, experience and know-how and who are also able to engage in teamwork with other business units due to awareness of their own position in relation to the overall process and understanding of the various links in the value chain. In addition, they have to be able to exert leadership as they go about the practical side of their jobs.

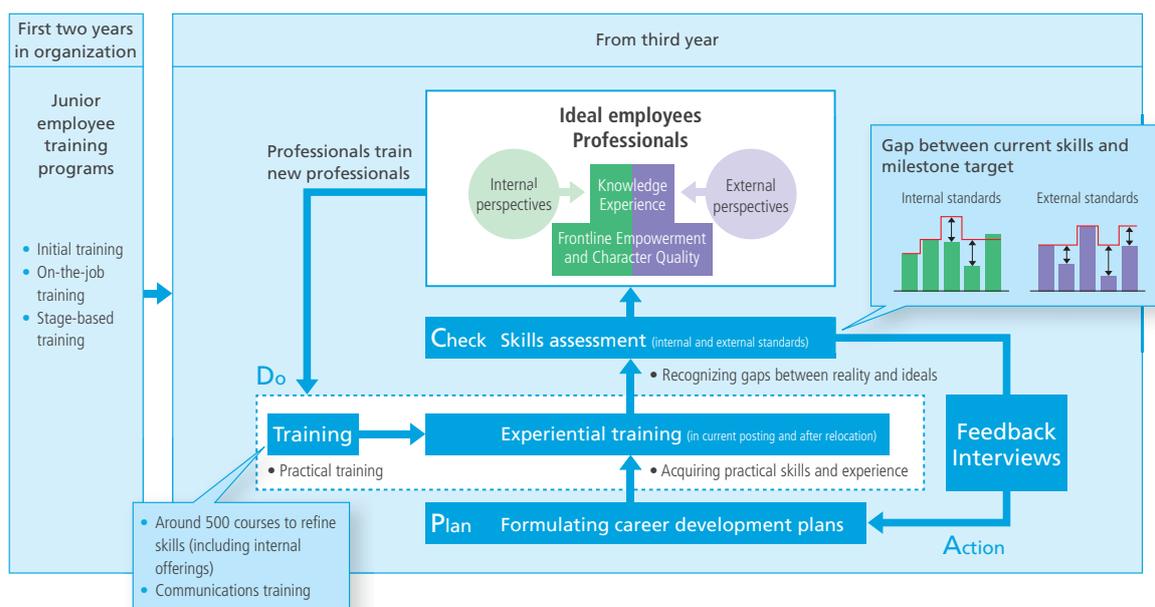
In fiscal 2007, we commenced professional advancement programs (see diagram on opposite page) with this definition in mind. The programs first require each employee to specify their own "ideal employee" image and to formulate a "career development plan" for achieving that state. Employees undergo regular "skills assessments" according to both internal and external standards before analyzing from various angles how their current skills match against their ideal state. Those results are then used to determine what job experience and training is required next. For example, an employee hoping to become a professional in the field of technological development might be placed in a maintenance services unit for a fixed period of time in order to gain the practical skills necessary for understanding a customer's perspective.

We have also specified indicators for professionals in each of eight human resource categories, including "product development" and "sales," which are classified according to business or occupational field and roles within the value chain. "Milestones" established in four stages are used to measure progress. At the end of fiscal 2008, 91 employees were certified as having reached Milestone 3 (Semi-Professional). Employees' paths to certification are disclosed via intranet so others can refer to them when developing their own career plans.

This system of "professionals" was devised by working groups set up for each of the eight human resource categories and those same working groups monitor the system and pursue trial-and-error improvements. Given that many companies implement top-down personnel measures and skill evaluations, our novel initiative whereby working groups play a lead role in implementing training and human resource development is drawing a great deal of attention.



## Overview of Professional Advancement Programs



## Advancing Diversity Management

The Diversity Office was established within the Human Resource Management Department in April 2008 to advance our business strategy of utilizing diverse human resources. The office set to work incorporating human resource diversity into business strategy through diversity management.

We are working to establish work environments where each and every employee can actively harness their abilities, regardless of gender, age, nationality or disabilities, and we are also actively creating many opportunities for employees to develop an awareness of the importance of diversity.

Support for involvement by female employees is our foremost issue. To ensure that childbirth and childcare do not cut an employee's career short, we provide assistance for, and hold interviews with, women returning from childcare leave. The NTT Group Female Manager Forum is also convened, attended by female managers from nine NTT Group companies. A wide range of other measures are implemented, including promotion of telecommuting.

Hiring of people with disabilities is another priority. In fiscal 2008, we satisfied the 1.8% statutory disabled employee ratio, but we are still pushing ahead with development of work environments where people with disabilities are able to

participate in a broad range of activities. We are increasing the scope of disabled employee involvement through a variety of efforts, including follow-up interviews to check up on progress since joining the company.

Through these initiatives, we aim to become a competitive company where individual employees can perform to the best of their abilities.

## Future Challenges and Outlook

Two years since their launch, professional advancement programs are fully established with frameworks in place for skills assessment, for example. In fiscal 2009, the third year of the programs, we will put effort into training programs that will lead to greater corporate competitiveness, such as increasing opportunities for the training of employees by employees who have reached a higher milestone. We will also look into extending programs to Group companies in Japan as well as to overseas affiliates.

Diversity management measures will be clearly prioritized and more effective approaches will be devised. Although difficult, measures will be pursued with the intention of producing results.

Staff Comment



**Kyoko Yamamoto**

Manager  
Human Resource Development Group  
Human Resource Management Department

The benefits of human resource development can only be seen with a view to the long term. Though benefits might not be immediately obvious, we will devote time to developing environments where everyone feels satisfied that they are performing to the best of their abilities. Employees will then be happy and the company will also benefit. In this belief, we will continue to search for ways to promote the professional advancement programs, clearing hurdles as we go.



**Yoko Omachi**

Manager  
Diversity Promotion Office  
Human Resource Development Group  
Human Resource Management Department

Advancement in diversity management requires cultivation of a corporate culture allowing all employees to get involved and a shift in employee mentality. I feel that initiatives such as implementation of e-learning relating to diversity and the distribution of communication handbooks have definitely changed how employees think. I would like to continue developing an organization where every employee can work with enthusiasm.

# 5

## Bridging People Through Social Contribution Activities

NTT Communications conducts social contribution activities as CSR programs allowing active involvement by employees and their families. As well as raising awareness of environmental conservation through hands-on experience, we are promoting interaction with local communities.

### Chichibu Rice Terrace Revitalization Project



This is so much fun!



#### Encouraging Interaction and Communication with the Community

NTT Communications' CSR programs involve employee participation. They are opportunities for our regular and temporary employees, and their families, to get involved in activities which will teach them about CSR's relevance and allow them to contribute to local communities and environmental conservation. One such program is the Chichibu Rice Terrace Revitalization Project implemented in the municipality of Chichibu, Saitama Prefecture.

This activity began in fiscal 2008 and aims to draw attention to environmental conservation, as well as encourage communication, through participation in the revitalization of rice terraces and protection of rare species, for example. The Saitama-based non-profit organization, Chichibu Environmental Association, assists with implementation of this activity.

Tasks ranging from plowing and planting of fields to weeding, harvesting and holding of harvest festivities are carried out on a regular basis (June-November) together with people of the community. Participants also get to experience the nature and culture of the Chichibu area, for example through firefly-watching and dining on local cuisine.



#### Continuity of Activities and ICT Utilization

As well as contributing through this activity to the revitalization of Chichibu's rice terraces and the protection of ecosystems, which include endangered insect species such as the rare Appasus major and the Tokyo salamander, tying up with the community and NPOs has brought to reality CSR programs involving our regular and temporary employees, and their families.

Continuity is an important factor in this sort of activity. The program has been extended in fiscal 2009 to include NTT Communications Group companies. We have recruited about 100 people who will carry out tasks on six occasions between June and November.

We also apply information and communications technology (ICT) to this project. The system enables real-time observation of fields via the Internet, and as the terraces are surrounded entirely by hills, we should also be able to learn about the ecology of small creatures and insects that appear in the fields. It is also possible to gather basic data such as air temperature, humidity and soil temperature. Therefore, we will continue activities using this sort of system with an eye on future contributions to agricultural productivity improvements and environmental education for children.

#### Partner Comment Yoshiro Kurosawa

Chairman  
Chichibu Environmental Association

This year we commenced various hands-on activities off the fields, such as planting of trees to attract insects, to complement our core activities in the fields. With a broader scope of activities, we hope people will come to learn more about Chichibu's attractions. Chichibu is rich in scenic resources and I hope many people will come to participate while taking in Chichibu's natural setting.



#### Participant Comment Kazuya Tsunakawa

IT Management Service Business Division  
ICT Outsourcing Department

My daughter and I participated in every operation last year and will participate again this year. Every time, my daughter ends up getting covered in mud along with all the other participants' children and seems to be having a great time running in and around the fields. I truly understand now the importance of such a rich suburban natural environment and feel pleased to have been able to contribute, even if just a little, to its conservation.



I watch it well!



# Afforestation Program "Morinosaisei.Com"

## Helping to Regenerate Natural Forest Lost to Development



Another project, "Morinosaisei.Com" got underway in fiscal 2009 and involves planting trees on vacated golf courses where the natural environment has been devastated. The aim of this long-term project is to regenerate a forest that will be a habitat for living things of diverse species and where insects and people can gather. The Chichibu Environmental Association provides guidance and assistance on this initiative, too.

The first planting took place on April 11, 2009. In a section of a vacated golf course in Chichibu, Saitama Prefecture, set aside for NTT Communications as a planting area, 85 participants comprising our regular and temporary employees, and members of their families planted 50 Rhododendron dilatatum seedlings. Rhododendron dilatatum was selected based on advice from the Chichibu Environmental Association that the tree's flowers contain insect-attracting nectar and blossom every April-May, meaning they could be viewed during the planting period. We had participants purchase the seedlings.

In June, we planted an additional 100 Rhododendron dilatatum trees and in September another 150 trees.



## ICT as a Link to the Future

When planting trees, participants gave each seedling a name and attached a hand-crafted name tag. The tags come with a QR code plate. By scanning the QR code, general visitors can access a mobile phone website to view details of planting activity. Using a login ID and password, those who participated in the planting are able to display the names of the trees they planted, their own names, planting dates and "messages for tomorrow" assigned to the trees. They can also view images indicating tree growth.

We hope that employing ICT in this manner will help employees and family members who participated in the tree planting, especially younger children, to develop an attachment to the forest and foster consideration of nature's importance. The planting has only just begun, but with the support of the Chichibu Environmental Association and people of the local community, we will continue working to rehabilitate environments destroyed at the hands of humanity and regenerate forests as habitats for diverse species of flora and fauna.



### Participant Comment Hiroyuki Misumi

OCN Services Department  
Net Business Division



Out under the sun, with sweat on our brows, touching the earth and trees with our own hands, this project allowing family members to regenerate forest together was the perfect opportunity for my children to get a first-hand feel for nature's beauty and importance. I want to return with my family one day to the forest, where insects also gather.

### Participant Comment Kunio Takagi

Enterprise Sales Division II  
Area Sales Department



Gathering leaves, digging holes and planting seedlings with our own hands was a great opportunity for parent and child alike to consider how valuable forests really are. An acorn we planted at our home last year has sprouted and has grown to 30 centimeters. We think it's about time we planted it in a forest somewhere.

### Participant Comment Denji Sakurai

NTT Com CHEO Corporation



I participated in the forest regeneration project with my cycling friends. The 90km course to Chichibu was perfect for training. Our company is working to increase work opportunities for people with disabilities through home-based employment. I would like to get more involved in activities that make a difference to society.

## Awareness of Environmental Issues—Acknowledging That It Is Your Business

**Tamura** All corporate activities of Group companies, including overseas affiliates, are related to corporate social responsibility. When evaluating a company, it is important to consider CSR in addition to business performance. In Japan, Omi merchants\* long ago developed their “Sanpo-yoshi,” or “good three ways,” philosophy, indicating that their business would benefit the seller, the buyer and society as a whole. CSR activity can be approached from various angles. What are your views on the topic of the moment—the global environment?

**Takashiro** I’ve been hearing about the environment since I was a child, so I’m very eco-conscious. I am concerned about what the world will be like in fifty years.

**Nakagawa** I distinctly recall being taught about the environment in elementary school. I remember reading a picture book in class about a polar bear crying on the ice. So I’ve been vaguely aware

of environmental matters since I was young. But really, nothing has changed.

**Sanjo** For the last decade or so, we’ve been told the river in my hometown has the highest dioxin levels for a river in Japan. But I had no idea what that really meant or what we should be doing about it.

**Kanazawa** The environment is probably too broad a subject for people to understand. I think we first need to cultivate awareness of the impact of our own individual actions.

**Sanjo** Yes. “How does it affect me?” The ability to view environmental problems from a personal perspective is crucial when trying to tackle them.

**Tamura** The NTT Group is in the process of formulating a long-term environmental vision for 2020 and plans to announce it in March 2010. NTT Communications will need to take further action on the environment in line with this vision.

## Reducing Environmental Impact by “Connecting” and Improving Efficiency

**Tamura** Ideally, a corporation’s CSR activity involves resolution of social

issues through its business. What do you think we can do for the environment as an ICT solutions company?

**Sasaki** Increasing the use of video conferencing to reduce the number of business trips helps save energy. I think our company has an advantage being able to contribute to the environment directly by persisting with services that are part of our main business. We surely have a role in improving the efficiency of social activity by “connecting” people using ICT.

**Takashiro** Consider boxed meals sold by convenience stores as an example in distribution. A large number of boxed meals are thrown out after they expire, but if stores could connect to networks to enable optimal distribution, they might be able to avoid such wastefulness. I believe technologies for optimizing ICT contribute directly to environmental efforts.

**Anan** As ICT spreads, there are concerns that power consumption will rise, due to sophistication of the equipment, for example. One of our major roles will be to find solutions to those problems through innovation.

**Sugimoto** I think there is still plenty we can do as a company in the network business besides efficiency improvements and optimization. Take environmental education. Networks could be used by schools for field trips to teach children about environmental initiatives in factories, for example.

**Nakagawa** Talking about connecting people to the field, we really want upcoming generations to consider environmental issues from a global perspective. It will surely be important to enable real-time experiential learning and interaction across national boundaries.

**Fujiwara** And not only children. In terms

### Employee Discussion

## Using ICT to Resolve Social Issues

What can the NTT Communications Group do to help resolve environmental problems and other issues confronting society?

Senior Executive Vice President Masae Tamura and nine new employees discuss the potential of ICT.

(From left) Hayato Anan, Yusuke Sasaki, Masakazu Takashiro, Hiroaki Hiramura, Kaori Nakagawa, Senior Executive Vice President Masae Tamura, Nobutake Fujiwara, Masazumi Sanjo, Satoshi Sugimoto and Daichi Kanazawa



of raising environmental awareness, I wonder if we can't do more to appeal to our customers. For example, we could plant a tree for every X number of people who register with "goo" and allow those people to view how their tree has grown in real time with the resulting amount of CO<sub>2</sub> reductions. The same goes for anything—make it fun and people will naturally begin to see the relevance of environmental issues and, ultimately, take action.

## Sometimes You Have to Experience to Understand— Meeting Social Needs With ICT

**Tamura** Not only does ICT contribute to CO<sub>2</sub> reductions, but those technologies offer solutions to various problems confronting society. But in order to accurately identify those social needs, every employee needs to become more sensitive to society. Programs requiring employee participation, such as the Mt. Fuji clean-up and revitalization of rice terraces, at the same time as being social contribution activities, are valuable opportunities for gaining first-hand experience of the world outside the company. You all participated in the Mt. Fuji clean-up as part of your initial training. How did you find it?

**Nakagawa** When I was a university student, I often took part in community clean-ups and while picking up litter I learned something very basic—that it's easy to contaminate the environment, but difficult to restore it to its original state. The same goes for the Mt. Fuji clean-up. Participating with friends and colleagues, you feel a sense of solidarity and accomplishment, and at the same time you gain greater awareness about

the environment.

**Sugimoto** I think the whole mentality of participating in activities such as the Mt. Fuji clean-up and wanting to clean up the environment and look after it, or considering the planet and global warming, is wonderful.

**Tamura** Experience is obviously important in any situation. Changing the topic now...Japan's food self-sufficiency ratio (in terms of calories) is currently 40% and the percentage of the population engaged in agriculture has dropped below 4%. Japan is the largest net importer of food in the world. We participate in the rice terraces revitalization project because we want to improve the self-sufficiency ratio and revitalize agriculture. What are your views on Japanese agriculture and food issues?

**Kanazawa** With the workforce aging, the future of Japanese agriculture looks grave. However, young people are starting to take an interest in agriculture and a growing number of people have lost their jobs under the present economic circumstances. I think building systems for linking farms, which are short of workers, with people who wish to give agriculture a go would contribute to developing the agriculture sector and improving the food situation.

**Sanjo** Land and human resources are available, so I think a system like the one Mr. Kanazawa suggested is possible. Introducing ICT for both employment matching and farm operation could surely bring about a more modern, more efficient agricultural industry. And then perhaps more people would wish to engage in agriculture.

**Sugimoto** Newcomers to agriculture will also lack basic knowledge of the industry so there is bound to be an

emerging need to build realtime online education systems using ICT in order to hand down know-how on agricultural techniques.

**Hiramura** I think it would be best to incorporate agricultural education into elementary and junior high school education. Not once in my life until now have I looked upon farming as an occupation. It is important that people realize that agriculture is a valid job avenue while they are still children. Perhaps city schools and farms could be connected using ICT for children to gain a virtual experience of the attractions of farming.

**Nakagawa** Awareness of food safety issues has grown in the last several years. I now check where food items come from when I go shopping. QR codes have recently been introduced so you can use your mobile phone to call up a photo of the producer or find preparation tips. This is very convenient and gives a sense of security. Building systems enabling such traceability would help fulfill society's demand for safe and reliable food. It might even lead to the growth of Japanese agriculture.

**Tamura** The "R" in CSR refers to "responsibility," which comes from the Latin, "respondere (to respond)." Possessing the determination to respond to issues confronting our society is the starting point for CSR activity. As employees of a corporation trusted by society, I ask that you go about your jobs committed to making a contribution to society using ICT.

\*Omi merchants: Famed merchants from the Omi feudal domain (present day Shiga Prefecture)



# 2009 CSR Indices

We established indices for activities based on our basic CSR policy.  
We will continue to revise and improve our indices in driving forward with CSR.

		Fiscal 2007	Fiscal 2008	Self-assessment	Fiscal 2010 targets	
Financial Performance	Parent company management indices					
	Operating Revenues	1,154.5 billion yen	1,127.1 billion yen	—	—	
	Operating income	104.7 billion yen	100.8 billion yen	—	—	
	Net income	62.7 billion yen	89.0 billion yen	—	—	
	Capital investment	108.1 billion yen	112.8 billion yen	—	—	
	Parent company environment management indices					
	Environment efficiency index for CO <sub>2</sub> emissions Sales (million yen) / CO <sub>2</sub> emissions (metric tons)	3.37	4.25**	Fair	—	
	Environment efficiency index for waste processing Sales (million yen) / Final disposal volume (metric tons)	103.2	221.2	Good	—	
Environment efficiency index for paper usage Sales (million yen) / Amount of paper used (metric tons)	421.1	380.6	Fair	—		
CSR Structure	Group CSR Committee meetings	3	2	Good	—	
	Group corporate governance					
	Board of Directors meetings	20	19	—	—	
	Board of Corporate Auditors meetings	17	17	—	—	
	Executive Council meetings	51	49	—	—	
	Market-In Promotion Council meetings	51	49	—	—	
	Group compliance					
	Number of classes on compliance in the workplace (number of participants)	557 (17,910)	658 (21,092)	Good	All group employees	
Questionnaire on Corporate Ethics	—	94.7%	—	95%		
Contributing to Society	Faithfully serving our customers					
	Initiatives to realize consistent high reliability					
	Number of training sessions to create highly skilled engineers (number of participants)	70 (540)	93 (680)	Good	—	
	Certification system to create highly skilled operators (number of people certified)	—	15	—	—	
	Relationships with society					
	Group rice terrace revitalization project events (number of participants)	—	7 (93)	Good	(90)	
	Group Mt. Fuji Cleanup Program events (number of participants)	—	2 (161)	Good	(160)	
	Friendly Internet classes (number of participants)	4 (85)	2 (41)	Good	2 (40)	
	Parent company donations	45,530,000 yen	41,760,000 yen	—	—	
	NTT Com CHEO's CAVA system participants (including home call center staff)	1,630	1,650	Good	—	
	Relationships with suppliers					
	Parent company meetings with suppliers to explain procurement	4	2	—	—	
Protecting the Environment	Group carbon dioxide emissions	358,000 metric tons	287,000 metric tons** (438,000 metric tons)	Poor	370,000 metric tons or less	
	Telecommunications equipment*	352,000 metric tons	281,000 metric tons** (432,000 metric tons)	Poor	—	
	Office	6,000 metric tons	6,000 metric tons	Good	—	
	Group electricity consumption	911.82 million kWh	679.57 million kWh (1,076.99 million kWh)	Poor	—	
	Telecommunications equipment*	895.25 million kWh	665.34 million kWh (1,062.76 million kWh)	Poor	—	
	Office	16.57 million kWh	14.23 million kWh	Good	—	
	Group greenhouse gases emissions (except CO <sub>2</sub> )	176t-CO <sub>2</sub>	404t-CO <sub>2</sub>	—	—	
	CH <sub>4</sub>	56t-CO <sub>2</sub>	227t-CO <sub>2</sub>	—	—	
	N <sub>2</sub> O	113t-CO <sub>2</sub>	170t-CO <sub>2</sub>	—	—	
	HFC	7t-CO <sub>2</sub>	7t-CO <sub>2</sub>	—	—	
	Group vehicle fuel consumption (gasoline and diesel) compared to the previous year	Up 10%	Up 14%	Poor	—	
	Group dismantled telecommunications equipment recycling rate	99.6%	99.1%	Good	99% or more	
	Group construction equipment recycling rate	93.0%	96.0%	Good	—	
	Designated materials (concrete, timber, rubble, etc)	98.7%	98.9%	Good	99% or more	
	Other materials	70.9%	79.5%	Good	84% or more	
	Group office waste recycling rate	58.6%	68.2%	Good	70% or more	
	Parent company paper consumed per employee (A4 equivalent)	13,919 sheets	12,420 sheets	Good	9,500 sheets	
	Group water consumption	898,000 cubic meters	840,000 cubic meters	—	—	
	Group chemical substance management: Amount of PCB stored	3,717 containers	3,717 containers	—	—	
	Group environmental communications initiatives	2	2	—	—	
	Respecting Our Employees	Group number of employees	13,220	13,810	—	—
		Japan	10,780	11,250	—	—
Asia (excl. Japan)		820	960	—	—	
United States		1,210	1,070	—	—	
Europe		410	530	—	—	
Parent company number of employees		8,550	8,360	—	—	
Men		7,650	7,455	—	—	
Women		900	905	—	—	
Average age		39.9	40.2	—	—	
Average years of service		17.1	17.9	—	—	
Number of female managers (as percentage of all appointees to such positions)		52 (2.4%)	46 (2.6%)	—	—	
Percentage of employees with disabilities (as of March 1)		1.44%	1.92%	Good	1.8%***	
Number of work-related accidents (while working or commuting)		6	18	Fair	0	
Number of people taking maternity leave		71	49	—	—	
Number of people taking childcare leave		111	109	—	—	
Number of people using special working system to assist childcare		98	120	—	—	
Number of people taking leave to care for elderly family members		6	3	—	—	
Number of people working reduced shorter hours to care for elderly family members		11	5	—	—	
Menu options under "cafeteria" plan (usage rate)		49 (99%)	49 (99%)	Good	100%	
Meetings for dialog between senior management and employees (number of participants)		11 (990)	12 (817)	—	—	
Experiential learning classes (number of participants)		6 (89)	3 (86)	—	—	
Group						
Classes on human rights in the workplace (number of participants)		557 (17,910)	601 (19,774)	Good	All group employees	
Human rights issues classes for senior managers (number of participants)		1 (45)	1 (46)	Good	1	
Classes on harassment (number of participants)		1 (237)	1 (182)	Good	1	

Notes: We provided information for self assessments and 2010 targets only where relevant, indicating non-relevant areas with dashes. Unless otherwise indicated, figures are as of March 31 or for April 1 through March 31.

\* Data center CO<sub>2</sub> emissions are included under telecommunications equipment

\*\* The NTT Communications Group included CO<sub>2</sub> emissions from telecommunications equipment belonging to other telecommunications carriers, but housed within its buildings, within calculations prior to and including fiscal 2007. However, calculations from fiscal 2008 onwards only include NTT Communications Group emissions.

\*\*\* Exclusion rate is applied to calculation.

## Third-Party Opinion

This is the third year in which I have commented on your report and your CSR policy and strategy have become gradually more defined over that time.

In particular, your position on CSR came across clearly this year by focusing on the Top Management's Commitment and five Special Features in the booklet and shifting detailed information to the online version.

Specific initiatives relating to your basic mission to continually provide "connection," or to "bridge," as mentioned in the Top Management's Commitment, are introduced in Special Feature 1 and 2. I was unexpectedly surprised to read that the NTT Group, previously operating only in Japan, was now using the quality of its service to gain competitive advantage for business expansion overseas. Japan is known for its manufacturing industry, but Japanese electronics and other manufactured items are losing ground to Chinese and Korean products in foreign markets. It is very encouraging, however, to see you steadily drawing customers to your communications services in overseas markets employing a typically Japanese attention to detail. Of course, such attention to detail demands enormous employee determination and diligence behind the scenes and it will be important for you to pay due consideration to employee work-life balance.

"Connection" is a theme which has broad significance for society. I know this overlaps with the crux of the NTT Communications Group Long-Term Environmental Vision established in 2004, which is disclosed online, but the current global economy is having to undergo a paradigm shift away from growth-driven economics, based on an idea of no limitations, and toward a new style of capitalism that accepts the Earth's environmental restrictions. Economic activities must be engaged in order to pursue happiness as opposed to material wealth. And concepts that will be important to that pursuit are "communities" and "connecting." People are supposedly happiest when they are able to sense that they are fulfilling a role within the community while being connected to others. In the past, this "connecting" would have been limited to areas in physical proximity, but modern information and communications technology (ICT) has succeeded in stretching across time and space and turning the planet into a single community. ICT has become the fundamental infrastructure for fostering awareness among people of our connection as

fellow citizens of Earth. Your basic mission to provide "connection," or to "bridge," goes much deeper than the mere business sense—linking together a worldwide communications network and ensuring that connections withstand disasters and other obstacles—and encompasses support for the sustainability of global society as a whole. I hope you will disseminate such meaning through your Group along with your Long-Term Environmental Vision. Doing so ought to raise employee motivation and give depth to your CSR activities.

In regard to the environmental problems, Special Feature 3 describes your global initiatives for preventing global warming. Although it was possible to gain an overall idea of initiatives carried out at each location, there was unfortunately no mention of any broad environmental strategy. Power consumption was shown, but only for the single fiscal year, and so it was not clear how you intend to apply that information to strategies for tackling climate change. There are large variations in the approaches that each nation is taking toward climate change and therefore it will be essential to formulate a long-term strategy that reflects differences between, for example, Europe, with its advanced measures, and the United States and China, which will be required to step up efforts. In the discussion between Senior Executive Vice President Masae Tamura and new employees, I read that the NTT Group is going to formulate a long-term vision for 2020 next year, 2010. I look forward to seeing what strategies and policies NTT Communications will devise as one of the more global companies within the larger Group.

The Special Feature on human resources touches on diversity management. Development of professional human resources is indeed a vital area contributing to employee motivation and to service quality improvements. Regarding women and people with disabilities, we are given specific measures, but how do overseas offices tackle this area? There are surely many things to be learned in this field from Europe and the United States. I would suggest you could develop a flexible approach, one that might involve learning from best practices in the West.

The feature on social contribution covered your participation in the Afforestation Program and the Rice Terrace Revitalization Project. President Wasai wrote, "While establishing the goal of forming



Ms. Kawaguchi joined Daiwa Securities in 1986 after completing a Master's degree in public finance and environmental economics at Hitotsubashi University's Graduate School. She transferred to the Daiwa Institute of Research in 1994. She has been a member of the Tokyo Metropolitan Government's Environmental Council, a committee member for the Kanagawa Industrial Vitalization Conference, an Environmental Businesswomen member for the Ministry of the Environment, a member of the Sustainability Japan Forum's council, and a director and executive committee member of the Social-Investment Forum Japan. She has also been a part-time instructor at Aoyama Gakuin University. She is a chartered member of the Security Analysts Association of Japan.

### Mariko Kawaguchi

General Manager of the Daiwa Institute of Research Ltd.'s Management Strategy Research Department

a recycling-based society. . . . the experience of learning from the frontlines leads to the creation of solutions." Indeed, ICT business and primary industry may seem far removed, but the convergence of the two could reveal some new social needs and business opportunities. Abandoned farmland and devastation of forests are also major issues for Japan. At present, the gist of your exercises is to provide opportunities for a portion of employees to experience nature, through volunteer planting of rice fields, for example. I believe if you continue and expand these activities, there is potential for new social business models that would go beyond the scope of social contribution activities.

In the booklet, CSR strategy was clearly set out in the Special Features. CSR management, however, in terms of targets and actual achievements, seemed difficult to grasp, integrated onto a single list of CSR indices. The performance report, which has been moved to the Web version, seemed too detailed, making it difficult to understand how PDCA cycles are executed for each CSR theme. You might also want to consider including in the booklet for future reports a brief summary of how PDCA is performed for each main theme. In particular, it is already common knowledge that ICT helps reduce environmental impact, but by how much can ICT reduce society's CO<sub>2</sub> emissions? As an ICT company, your social responsibility in this area is comparable to your responsibility for ensuring "connection." Regarding climate change, you will be formulating a new long-term CO<sub>2</sub> reduction plan next fiscal year and I hope you will put forward a strategy stipulating concrete medium- and long-term reduction targets.

## Response



### Masae Tamura

Group CSR Committee Chairman and Senior Executive Vice President of NTT Communications

Ms. Kawaguchi has been evaluating our activities for three years now, from fiscal 2006, providing the "Third-Party Opinion" for our CSR Report. Honest opinions from a third party are essential if we are to instill greater value into our activities. We will seek improvements in areas

Ms. Kawaguchi has pointed out.

One area Ms. Kawaguchi mentioned was environmental strategy. Based on NTT Group medium- to long-term targets, we will put forward, and set out to achieve, our own medium- to long-term targets and strategies as befitting an ICT company.

In the area of diversity, we are working to develop human resources with both skills in "Frontline Empowerment" and "Character Quality" and will be enhancing these efforts further.

In fiscal 2008, we commenced CSR activities

involving employee participation based on the natural cycle—mountain to river to sea. Those activities included Afforestation Program and the Rice Terrace Revitalization Project. In fiscal 2009, we have been enhancing those activities using ICT.

By firmly establishing CSR activity, and implementing measures at Group companies both in Japan and overseas, NTT Communications will continue its contribution toward creation of a sustainable society as is demanded by our various stakeholders.



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- Paper: The report is printed on FSC-certified paper sourced from forests which are well-managed, as attested to by the Forest Stewardship Council.
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- Power Use: Electricity for printing of this CSR report 2009 (ten thousand books) has been fed by solar power (583.62kWh) only. By using the Green Power Certification, we support the adoption of more environmentally friendly renewable energy generation.

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