NTT Communications Group

Corporate Social Responsibility Report 2006

NTT Communications Group
CSR Report 2006

Scope of this Report

This report deals with the operations of NTT Communication Corporation and some of its Group companies.

Date of Publication

November 2006 (Previous issue: March 2006; next issue: November 2007)

Enhancing the Credibility of the Report

In order to enhance the credibility of the content and provide an opportunity for active dialogue, we have invited a third party opinion, starting with this report. (See page 32)

Available Online

This report is also available on the NTT Communications website: (www.ntt.com/csr_e/)

We will provide updated and related information on the NTT Communications website to supplement the content of this report. In addition, last year's CSR Report and the Environmental Activities Reports starting from two years ago are available in the back numbers section. There is also an online questionnaire and contact addresses for inquiries.

We hope that you will find this information useful.

Inquiries

NTT Communications Corporation
CSR Promotional Office, General Affairs Department
(Contact information is listed on the back cover.)

Contents

About the Corporate Social Responsibility Report 2006

▎Editorial Policy

The NTT Communications Group defines its CSR activities as "contribution toward achieving a sustainable prosperous community by creating new social values and solving problems on a global scale through Information Communication Technology (ICT) services that we provide as a ICT solutions partner." We have issued this report in order to communicate our attitude and activities through such CSR initiatives to as many stakeholders as possible in a format that is easy to understand.

On this occasion we, as much as possible, reflected opinions and views expressed by readers of the CSR Report 2005 issued last year, and assembled the report according to the three pillars set forth in the NTT Communications Group's Basic CSR Policy, established by the Group in June 2006. The report is put together in a way that the specific attitudes and activities of each individual in the Group are linked to the basic policy.

We have sought a concise and plain style so that anybody can read the report in a short time and gain an understanding of the CSR initiatives in the NTT Communications Group.

Reference Guidelines

GRI Sustainability Reporting Guidelines 2002

Ministry of the Environment Environmental Reporting Guidelines (Fiscal Year 2003 Version)

Environmental Accounting Guidelines 2005

▎The Main Points of the CSR Report

Publication of the Basic CSR Policy

In this report, we introduce the NTT Communications Group's new Basic CSR Policy established in June 2006 as the core of our CSR philosophy. This is presented in conjunction with the President's Message.

Performance Report Based on the Three Pillars of the Basic CSR Policy

The introduction of our CSR activities is based on the three pillars of the Basic CSR Policy, which are contributing to society, global environmental protection, and respecting employees. With a view to strengthening the management of the Group as a whole, we have published data related to the entire NTT Communications Group as much as possible, along with highlighting the efforts of specific Group companies.

Contributing to Society

An introduction to our unique approach as part of community

The specifics of our initiatives towards a safer, more secure society, proposals and support for new business models and lifestyles, and efforts in becoming a company valued by society are introduced, including related matters with our customers and other stakeholders.

A special feature about testing and demonstration of electronic tags looks at one part of the world of ubiquitous networks that we are working to achieve in the near future.

Global Environmental Protection

Targets and results, and approaches to achieving our targets

We report on the targets in our medium- to long-term plan up to fiscal 2010 and the results to date, and explain our approaches to achieving the remaining targets. We have increased our detailed performance data from two years covered in last year's report to four years, making the changes over time easier to understand.

A special feature about measures against global warming in communications equipment rooms looks at one of our initiatives that received particularly high praise from outside the Company.

Respecting Employees

Enhanced objectivity through a numerically quantified approach

Since we made respecting employees one of the pillars of our Basic CSR Policy, we have significantly consolidated our reporting of related activities. We have reported our performance in numerical form as much as possible, in order to present the data objectively.

Third Party Opinion

In order to enhance the credibility of the content and provide an opportunity for active dialogue, we present a third party opinion from Professor Katsuhiko Kokubu of the Graduate School of Business Administration of Kobe University. In response, a comment is provided by Senior Executive Vice President Masaki Mitsumura, Chairman of the NTT Communications Group CSR Committee, concerning the Group's future CSR approach.

President's Message

Greetings

The NTT Communications Group issued its first Corporate Social Responsibility (CSR) Report in 2005, reexamining our activities from a CSR perspective and presenting our basic stance to the issues involved. This year, we are issuing our second report, the *Corporate Social Responsibility Report 2006*. Previous to the issuance of this report, in August 2005 we inaugurated the CSR Committee with Senior Executive Vice President Masaki Mitsumura as its chairman, and in June of this year, we established the Basic CSR Policy for the NTT Communications Group. This is based on the three pillars of contributing to society, global environmental protection, and respecting employees. With these steps the Group established a framework for thinking about CSR as well as management structures within the Group for promoting CSR activities.

This opportunity presented by the establishment of our Basic CSR Policy will enable each employee of the Group to have a shared view about what CSR means to us. We aim to reflect this view of social responsibility in all the business activities of the Group companies through the individual initiative of each of our employees.

As a member of society, we have been engaged in our business activities with the aim of becoming a truly helpful "ICT Solutions Partner" to our clients as well as to society as a whole—a partner who can provide reliable

Our CSR Philosophy

Our Basic CSR Policy

As an ICT solutions partner, the NTT Communications Group contributes to building a prosperous and sustainable society by working to create new community value and solutions on a global scale through providing telecommunications services.

Contributing to Society

- NTT Communications is working to improve information and communication technologies and to provide highly stable, reliable, and secure communications services on a global scale, thereby achieving a safer, more secure society.
- NTT Communications contributes to building a society in which all its various members can actively take part by working to create new community value through proposals and support for new business models and lifestyles.

Global Environmental Protection

- In all aspects of our business activity, NTT Communications works actively to protect the environment, contributing to building an environmentally harmonious society through our telecommunications services.

Respecting Employees

- NTT Communications respects the diversity of our individual employees and works to ensure a workplace environment that enables the self-fulfillment of our employees. We and our partners maintain high ethical standards in fulfilling our social responsibility through our corporate activities as telecommunications professionals.

Contributing to Society
Towards a safer,
more secure society
Offers new business models
and lifestyles

Global Environmental Protection
Environmental protection
in all business activities
Achieving an environmentally
harmonious society
through our services

Respecting Employees
- Respect for diversity
- Building a workplace environment that enables self-fulfillment
- Maintaining high ethical standards with our partners in fulfilling our social responsibility through our corporate activities

and stable ICT services to solve the issues confronting society and to respond to a variety of business and social needs. Through our core business telecommunication services, we, along with our customers and all other members of society, aspire to serve to domestic and global communities in all aspects, from economic activities to social life. With this vision in mind, we seek to play a vital role in creating new value for society at large, and to contribute solutions to the world's pressing needs through our telecommunication networks and associated services and solutions. This way of thinking represents our basic attitude to CSR. We believe that, in powerfully driving such CSR activities, it is critical to strengthen "Character Quality" of each individual employee, and "Frontline Empowerment"—nurtured by direct contact with customers at the frontline of services. At present, we are earnestly implementing a variety of reform measures to encourage such capabilities in our employees.

The CSR Report 2006 provides an introduction to some of the CSR activities of NTT Communications Group employees. I hope this report will serve to aid your understanding of our CSR activities.

Finally, I would like to thank everybody for the many comments we received about the CSR Report 2005. We have endeavored to reflect these opinions in the current report, and for the first time, this report also includes a third party opinion representing our stakeholders. We place the highest value on your opinions, and we believe that your input is crucial in enabling us to improve our CSR activities and reports. Therefore, I ask once again that you contact us with your frank opinions and requirements concerning the CSR Report. With CSR activities, there is no goal line. But the NTT Communications Group will work as a team to keep moving forward steadily, one or two steps at a time, always aiming to merit your confidence in the Company as your ICT solutions partner.

NTT Communications Corporation
President & CEO   Hiromi Wasai

Our Code of Business Conduct

NTT Communications constantly aims to provide solutions for the economic, social, and environmental problems that beset the stakeholders we serve in our daily business activities. We operate according to a set of action standards, which set out "actions to take" and "actions not to take," with respect to each stakeholder group.

Society	Achieve a Cooperative Relationship	1. By providing safer and innovative Internet services, we will contribute to the positive growth of the Internet society. 2. We will cherish the members of society closest to us such as families and local communities. 3. We will understand and respect the cultures and customs of different nations. 4. We will contribute to the development and rebuilding of society.
Customers	Maintain Long-Term Relationships of Trust	1. We will provide solutions and services that will truly benefit customers by understanding their needs. 2. We will act responsibly and with pride as members of a Global IP* Solution Company in responding quickly, flexibly, and with integrity to our customers. 3. We will establish enduring relationships of trust with our customers.
Business Partners	Establish Partnerships	1. We will fully utilize the partnerships we have formed to maximize value for our customers. 2. We will select our business partners in a fair manner. 3. We must not forget that, as equal partners, other companies have the right to consider the merits of forging a partnership with us.
Employees and the Workplace Environment	Trust and Respect Each Other	1. Each employee shall possess an awareness and sense of responsibility as an Internet Professional. 2. We will recognize others' individuality and diversity, and we will respect and trust each other. 3. We will create an environment that is conducive to personal development and the fulfillment of our goals. 4. We will undertake creation of a vital workplace environment.

* Internet Protocol

NTT Group CSR Charter

■**Our Commitment**

As a leader of the information and telecommunications industry, the NTT Group is committed to providing reliable, high quality services that contribute to the creation of a safe, secure, and prosperous society through communications that serve people, communities, and the global environment.

■**Our CSR Goals**

Communication between people and their communities
1. We shall strive to create a richer and more convenient communications environment, and utilize our technology to contribute to the resolution of the various issues faced by societies with aging and declining populations.

Communication between people and the global environment
2. We shall strive both to reduce our own environmental impacts and build environmental-friendly forms of communications, and to provide information and communications services that help to reduce the impact of society as a whole on the global environment.

Safe and secure communication
3. While striving earnestly to ensure information security and resolve telecommunications-related social issues, we shall do our utmost to provide a safe and secure user environment and contribute to the creation and future development of communication culture.
4. Fully recognizing the role that telecommunications plays as critical infrastructure supporting society and protecting our livelihoods, we shall strive to offer secure and reliable telecommunications services fortified to withstand disasters and capable of connecting people irrespective of time, location and other circumstances.

Team NTT* communication
5. All of us on Team NTT pledge to perform our duties with pride and a keen sense of responsibility in compliance with the highest of ethical standards, striving to fulfill our mission to society by working both for our own development as professionals, and for the further development of a flourishing and vibrant community.

* Team NTT comprises all NTT Group employees, including temporary employees, contract employees, employees of our corporate partners, and also former employees who endorse the NTT Group's CSR activities.

Our Framework for Promoting CSR

Focused on strengthening corporate governance, establishing a compliance framework, and promoting awareness of human rights as vital business issues, the NTT Communications Group is promoting more sound management and greater transparency of its business based on a strong sense of ethics.

Corporate Governance

Governance Framework

The Board of Directors of NTT Communications is composed of 14 directors (as of June 30, 2006), and in principle, meets once a month to decide and report on important business matters. The board also includes one outside director to strengthen its ability to supervise the fairness with which it executes its business activities.

The Board of Statutory Auditors is composed of three outside statutory auditors. The statutory auditors are present at all important meetings, including meetings of the board of directors, and audit the execution of Company activities. The statutory auditors have their own staff and dedicated organization to provide assistance in these duties.

Theme-based councils and committees have been established as venues for discussion of important matters regarding the management of the Company and the Group, and to make decisions after due deliberation. Specifically, the Executive Council and Market-In Promotion Council have been established to assist the president in decision-making. Other committees include the CSR Committee, Compliance Committee, Business Risk Management Promotion Committee, Human Rights Awareness Promotion Committee, and Work-Life Committee.
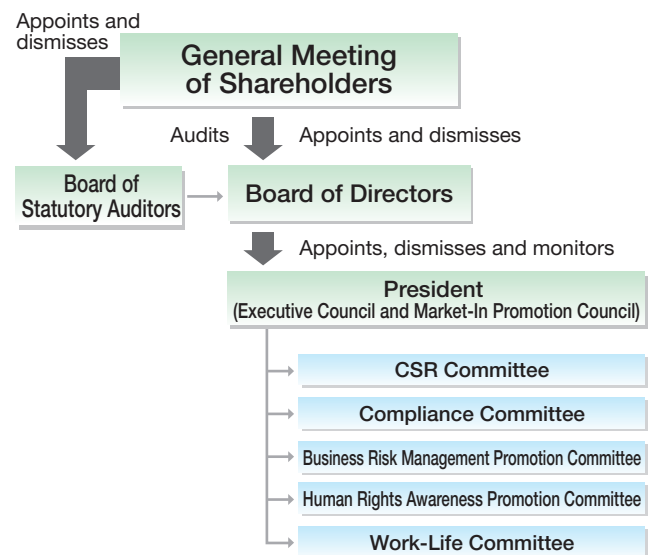
Internal Controls

In response to the Corporation Law, which came into effect in May 2006, NTT Communications and its main Group companies followed the NTT Group's basic policies regarding the development of a system of internal controls, and the board of directors decided to implement necessary measures at NTT Communications. The following is NTT Communications' basic philosophy regarding the development of a system regarding internal controls.

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

(2) A Legal and Internal Audit Department shall be established to monitor evaluations of the effectiveness of the development and status of operation of the above system of internal controls. Necessary improvements shall be implemented after effectiveness has been evaluated through the conduct of audits, as well as special audits of the NTT Group's shared high-risk items against audit criteria standardized by Nippon Telegraph and Telephone Corporation.

(3) In cooperation with Nippon Telegraph and Telephone Corporation, appropriate efforts shall be taken to ensure the credibility of the system of internal controls based on the U.S. Sarbanes-Oxley Act.

(4) As the chief executive officer, the president will be responsible for ensuring the establishment, maintenance, and operation of the system of internal controls.
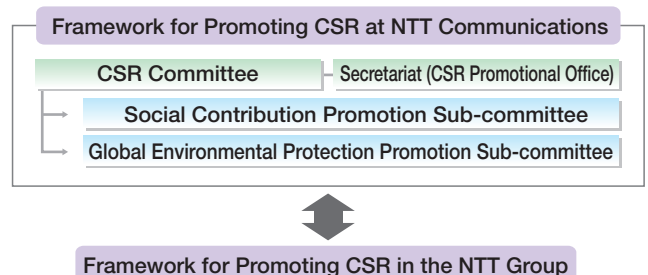
Audits by Statutory Auditors

NTT Communications' statutory auditors conduct appropriate audits of the status of the directors' execution of their duties. These auditors strive to enhance the strength of the auditing framework by maintaining close contact with accounting firms and other specialists and regularly exchanging information on audit plans and the results of audits.

CSR Committee

In August 2005, NTT Communications established the CSR Committee, chaired by a senior executive vice president of the Company, to delineate the management framework for promoting CSR activities. Two subcommittees were also established: the Social Contribution Promotion Sub-committee and the Global Environmental Protection Promotion Sub-committee.

The CSR Committee convened three times in fiscal 2005 and two times in fiscal 2006. The committee issued CSR reports and activity performance reports, discussed basic CSR policy for the NTT Communications Group, and decided on a direction for activities. In the future, the CSR Committee will continue to hold discussions, and will work to disseminate information about the NTT Communications Group's CSR activities.

Governance Framework

Appoints and dismisses

General Meeting of Shareholders

Audits — Appoints and dismisses

Board of Statutory Auditors → Board of Directors

Appoints, dismisses and monitors

President
(Executive Council and Market-In Promotion Council)

- CSR Committee
- Compliance Committee
- Business Risk Management Promotion Committee
- Human Rights Awareness Promotion Committee
- Work-Life Committee

Framework for Promoting CSR at NTT Communications

CSR Committee — Secretariat (CSR Promotional Office)

- Social Contribution Promotion Sub-committee
- Global Environmental Protection Promotion Sub-committee

Framework for Promoting CSR in the NTT Group

Compliance (Corporate Ethics and Business Risks)

We at the NTT Communications Group recognize that in order to establish strong corporate ethics, an enterprise must approach all business operations with a strong ethical compass and not merely consent to comply with the law. We are actively driving forward a broad array of actions in compliance and corporate ethics guided by the NTT Group Corporate Ethics Charter, proclaimed in November 2002.

Building a Framework to Promote Corporate Ethics

We are proud of our long history of vigorous efforts to establish corporate ethics. To bolster this stance still further, in November 2002 a Compliance Committee was established within NTT Communications, establishing a framework of responsibility that embraces directors, structures, and organizations tasked with responsibility for corporate ethics.

Raising Awareness about Corporate Ethics

The NTT Communications Group offers its employees a full menu of options on a continuous basis to learn about corporate ethics, including training programs for all employees, programs tailored to particular management grades, and external classes/lectures.

Group Hotline

When NTT Communications established the Compliance Committee, the Company also established an NTT Communications Group Hotline. This hotline is available to employees across the Group, including those at overseas affiliates.

In addition, our parent group (the NTT Group) has established an external office staffed with attorneys for reporting and consultation, which assists in fostering free and frank communication within the Group.

NTT Group Corporate Ethics Charter

1. Recognizing the establishment of corporate ethics as one of its most important missions, top management shall exert its leadership to ensure that the spirit of this Charter is adopted throughout the Company, and shall assume full responsibility for solving any problems when any event inconsistent with that spirit occurs.
2. Every person with subordinate employees shall not only act in a self-disciplined manner, but shall also always provide guidance and assistance to his/her subordinate staff to ensure that their conduct is in conformity with our corporate ethics.
3. Every officer and employee of the NTT Group shall not only comply with all laws and regulations, social standards, and internal company rules whether in Japan or overseas, but officers and employees shall also hold the highest ethical philosophy within himself/herself both in public and in any private situations. Among other things, each officer and employee, as an officer or employee of a Global Information Sharing Corporate Group, shall keep himself/herself fully aware that any disclosure of customer or other internal privileged information constitutes a materially wrongful act. Also, as a member of a group of companies which holds great social responsibilities, he/she shall strictly refrain from giving or receiving from customers, business partners, and other interested parties excessive gratuities.
4. Each NTT Group company, at the first opportunity, shall take initiatives to provide training programs in order to help its officers and employees enhance their awareness of our corporate ethics.
5. Every officer and employee of NTT Group shall direct his/her efforts to prevent wrongful or scandalous acts which may potentially occur as specialization and advancement of our business proceeds. Each NTT Group company shall improve its system to prevent such acts, including, for instance, the re-assignment of contract representatives who have remained with the same customers for a long period of time, and the improvement of monitoring tools to protect customer and other information.
6. Any officer or employee who may come to know of the occurrence of any wrongful act or any scandal shall promptly report the wrongful act or scandal to his/her superior or other appropriate persons.
If he/she is not able to make such a reporting, he/she may contact the "Corporate Ethics Help Line (Consulting Center)." It should be noted that every officer and employee who reports the occurrence of any wrongful act or scandal shall be protected so that the reporting party shall not suffer any negative consequences due to such reporting.
7. In the event of an occurrence of any wrongful act or scandal, each NTT Group company shall be committed to the settlement of the problem by taking appropriate steps through a speedy and accurate fact finding process, and responding in a timely, suitable, and transparent manner in order to fulfill its social accountability.

Business Risk Management

NTT Communications has established the Business Risk Management Promotion Committee, headed by a senior executive vice president of NTT Communications, to enhance the management of business risks associated with the Group's corporate operations. This committee—composed of the presidents of Group companies and members of relevant divisions—studies and forms countermeasures to large-scale risks (focusing on prevention) that could affect the entire Group, including external risks such as natural disasters and terrorism and internal risks such as corruption and misconduct. Moreover, the Company has established a system where, should a major risk event actually occur, a Disaster (Accident)/Risk Response Headquarters would be established, headed by the president or a senior executive vice president depending on the situation. The headquarters would swiftly collect accurate information on risks and, based on this information, make immediate and appropriate decisions. In the future, the Company will prepare and distribute a common manual to help Group companies address risk management issues, and also plans to implement regular training sessions.

Human Rights Awareness Promotion Committee

As a company that is expanding globally, NTT Communications has established the Human Rights Awareness Promotion Committee and is undertaking various initiatives to create a rich culture of human rights.

See "Comprehensive Education to Raise Human Rights Awareness" on page 31 for details on these initiatives.

Work-Life Committee

NTT Communications has established a Work-Life Committee, composed of Company and employee representatives, and is undertaking various initiatives with the aim of creating workplaces that provide job satisfaction to all employees and improving employees' work-life balance.

See "Work-Life Committee" on page 30 for details on these initiatives.

COLUMN

Efforts to Ensure Principles Are Broadly Shared among Employees

Following the establishment of NTT Communications on July 1, 1999, we prepared a pamphlet, *OBP (Our Business Principle)*, which clearly explained a common basic mission, values, and code of conduct. The pamphlet was distributed to all employees and our partners' employees in an attempt to disseminate these principles. OBP presents the guiding principles of our business activities and is the basis of the NTT Communications Group's efforts to promote CSR activities.

Special Feature

Ongoing Testing and Demonstration of Electronic Tags for a World of Ubiquitous Networks

What sort of ubiquitous network society will emerge when electronic tags and networks are linked? A number of demonstration experiments are underway.

Heading for a New Frontier Linking Electronic Tags and IPv6* Networks

Using ICT, the NTT Communications Group is working on a range of research and development projects with the aim of achieving a society of ubiquitous networks where everybody can communicate freely with a sense of security. Electronic tags, known variously as Radio Frequency Identification (RFID) tags, ID tags, and wireless IC tags, are identification tags that communicate using radio signals. They are starting to find general use in fields like product inventory management, distribution management, and traceability management (production history) for food products.

NTT Communications is developing basic technology ("m2m-x") that enables IPv6 networks to be used more easily. Building on this know-how and record of achievement, we aim to link IPv6 networks with electronic tag technology to expand their range of application. To this end, we are carrying out a number of relevant demonstration experiments.

* IPv6: A next-generation Internet protocol with expanded address space, built-in security functions, and simultaneous delivery to multiple locations among other improvements. The protocol allows tens of millions of non-PC terminals to connect securely to IP networks in order to process information from as many as 10 billion RFID tags.

Passive Tags—the Key to Replacing Position Sensors

In this test, position information sensor functions were centrally managed by an external computer using electronic tags and an IPv6 network, exploiting the ability of robots to move precisely over wide areas to provide directions in a shopping mall. This demonstration experiment was carried out in the huge Diamond Silk City Lucle shopping center in Kasuya, Fukuoka, in February 2006. First, customers indicated where they wanted to go from the places shown on the touch panel of the robot. In order to confirm its position, the robot then sent information received from the passive electronic tags used for positioning, embedded at regular intervals in the floors of the shopping mall, to an external computer. The external computer analyzed the information and issued instructions to the robot for moving to the target location. Since the external computer has position information, all that is necessary is a function in the robot for moving according to the instructions. This means that the robots can be made simply and at low cost. In addition, individual shops' information can be picked up from shop information electronic tags, while a variety of information on products, including distributors and manufacturers, is available from electronic tags. Such information can in turn be utilized as a guide for shopping.

Enjoying Remote Shopping through a Proxy Robot

Another type of robot is fitted with a camera and is controlled remotely from a different location using a computer. The robot functioned well as the shoppers' representative, helping the shoppers actually look at the shapes and colors of goods through the image from the camera, reading the product information from electronic tags, and enabling direct dialogue with the shop clerks via a TV screen and voice communication.

Using the results of this sort of trial, it is possible to make simple, low-cost robots that are safe and move with precision. In the near future, people with physical disabilities will be able to ride robots like these, making purchases simply with voice commands, or shopping via a camera-equipped robot controlled remotely with a computer. They are thus expected to play a number of helpful roles in society.

■Shopping navigator robots
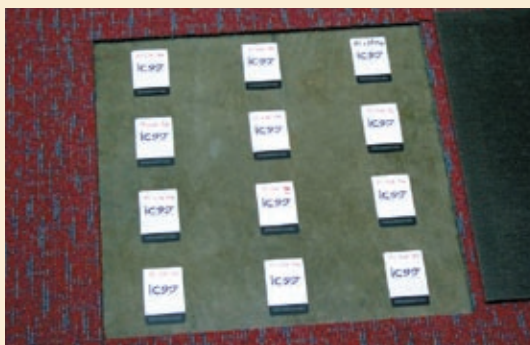
■Electronic tags embedded in the floor

■Demonstration experiment for a shopping navigator robot

Trial of Make-Up Simulation Software

See Your Own Make-Up Simply by Selecting Cosmetic Products

Another trial was carried out as part of the IPv6 Information Appliance Research and Development Project of the National Institute of Information and Communications Technology (NiCT) at the Chazawa-Dori Branch of the Seijo drugstore in Tokyo's Setagaya Ward from February to March 2006.

You sit in front of the make-up simulation PC fitted with a camera, and make selections from a range of lipsticks and powders. When you place them on the electronic tag reader, the products you selected are shown applied to an image of your face on the computer screen. With this system, the information in the electronic tags attached to the lipstick and powder products is read by the special tag reader, and is sent via a network to an external computer. Color information is then sent from the external computer and is shown on the screen image. There are other functions too, such as the option to show eye shadow that matches the lipstick and powder selected on the screen.

Anybody Can Use It Without Being Aware of Computers or Communications

The customers who took part in the trial responded very favorably, with comments like: "It's really convenient because you can try out the make-up without putting it on every time," and "You can see right away whether or not it suits you," while the shop staff reported that, "There's no need to provide free samples, so it's faster and much less hassle." Also, valuable real-time marketing data such as which products customers tried could be obtained at the same time.

With this system, neither the customers nor the staff need to be familiar with information technology, but because they can use it easily without being aware of the communications technology or computers, it can truly be said to be a practical example of ubiquitous technology. In this case the technology was used for trying out make-up, but it can be used in a wide range of other applications such as trying on mail-order clothes virtually, or trying out interior coordination possibilities for wallpaper, curtains,

■Demonstration experiment

■Simulation screen

sofas and other items in builders' showrooms and furniture shops.

NTT Communications will continue to offer groundbreaking proposals for new business models and lifestyles using ICT.

▪ COLUMN

Participation in Various Tests and Demonstration Experiments of Electronic Tags

Child Watching Services in Kurashiki, Okayama (February 2006)

Almost every day there are reports of children being caught up in crimes, and this is becoming a problem for society. In order to minimize concerns and burdens of parents, we are carrying out tests for watching children in cooperation with local communities. With this system, when a child passes an electronic tag over an electronic tag reader or "spot," set up in various places within the elementary school grounds or along the route to school, the information is gathered from the spots and sent via e-mail or a website to the child's guardian or teacher to notify them. Actually, in addition to the Mail Notification Service that sends times, locations, electronic tag IDs, and other information by e-mail, we tested several services including the Kids' Whereabouts Record Service that lets parents check a website to see which spots their child passes and when, and the Attendance Information Service where parents can check on their child's attendance record at elementary school via a website. (A test based on Research and Development on Technologies for Advanced Use of Networked Electronic Tags of the Ministry of Internal Affairs and Communications)

Administration of a Bicycle Parking Lot in Mitaka, Tokyo (March 2005)

In this test, electronic tags were attached to bicycles whose riders used the bicycle parking lot. The attendants went around the lot with a Personal Digital Assistant (PDA) reading the information about the bicycles from the tags. This information was then used for the purpose of managing the parking lot. Users could check if there were empty spaces in the lot from their home PC or mobile phone, or quickly find the place where their own bicycle was parked. In addition, the managers of the parking lot could expand their capabilities, for example, in managing bicycles parked for a long time. In this way, electronic tags make parking lots more convenient for users and reduce management costs. (A test based on Research and Development on Technologies for Advanced Use of Networked Electronic Tags of the Ministry of Internal Affairs and Communications)

Towards a Safer, More Secure Society

We are working to improve information and communication technologies and to provide stable and highly reliable communications services on a global scale.

Network Technologies and Control Systems for the Information Age

Ensuring Reliability with Multi-Routing, Redundancy, and 24 Hour/365 Days-a-Year Monitoring

In order to ensure the reliability of the communications backbone of the Japanese archipelago provided by NTT Communications, the network is designed with multiple routes throughout the whole country. Therefore, if one route should fail due to a natural disaster or other cause, communications are switched automatically to another route. Moreover, our communications facilities are decentralized, with backup equipment available, and we monitor performance 24 hours a day, 365 days a year. In this way, we are able to provide network services of consistently high reliability.

NTT Communications Customer Network service Center (CCNC): High Quality, High Efficiency, and High Reliability

To ensure uncompromising reliability in communication with support for a broad range of operational modes, NTT Communications maintains centralized operation and management of our network services. This centralization enables the Company to provide our customers with unsurpassed levels of quality, efficiency, and reliability.

(1) One-Stop Customer Service for Resolving Product Failures
With a single, centralized contact point for resolving product failures, we respond quickly and attentively to customer concerns.

(2) Monitoring and Control of Equipment at Network Service Nodes
Nationwide monitoring 24 hours a day, 365 days a year assures outstanding reliability for our network services.

(3) Quality Control Tailored to Individual Customer Needs Based on Service Level Agreements (SLA) and Failure Analysis Reports
NTT Communications provides individually tailored quality control and analysis reports.

Ensuring Network Reliability in the Face of Disaster

Based on past experience, the NTT Communications Group carefully prepares for the possibility of large-scale, unforeseen disasters. Our core policy is to constantly improve the reliability of our networks, safeguard vital communications, and restore service quickly when accidents occur. On this basis, we are building a communications network that is highly resistant to natural disasters, including the anticipated earthquake directly under the Tokyo region, as well as earthquakes, torrential rain, and tsunamis throughout the country.
(1) Multi-routed communications networks, and improved quality through redundancy and decentralization.
(2) Building networks to withstand earthquakes up to category 7 on the Japanese scale of intensity (heavy structural damage).
(3) Disaster-proofing using fireproof shutters, fireproof doors, fire extinguishing systems, and heat and fire resistant cables.
(4) Failsafe power backup systems including emergency electric generators for power blackouts and uninterruptible power supply equipment.
(5) Strengthened building security implementing rigorous access management.

In addition, as a designated public institution, the NTT Communications Group has formulated a disaster prevention plan that lays down measures to be taken regarding disaster prevention in accordance with Japan's Basic Law on Natural Disasters and the Civil Protection Law.* We have also established a strong disaster preparedness posture based on regular, scenario-based disaster control drills.

Through these measures, the NTT Communications Group is undertaking preparations to carry out disaster control in a smooth and appropriate manner, and to secure critical communications in cooperation with national government agencies, local authorities, and among all NTT Group companies.
(1) Securing emergency communication links with police, firefighters, local government, and other important services to enable disaster relief and recovery.
(2) Group-wide organizational measures, such as a Disaster Response Headquarters that can react rapidly in the event of disasters or accidents.
(3) Provision of a Disaster Emergency Dengon (Message) Dial (171) for emergency contact and for confirming people's safety.
(4) Equipment measures such as the dispatch of mobile power supply trucks, installation of disaster-response equipment, and the use of helicopters for locating accident sites and transportation of people/materials.

* Civil Protection Law: the law concerning the measures for protection of the people in armed attack situations, etc.

■Mobile power supply truck

■Disaster control drill

Increasing Reliability Worldwide

Global Network Service

As business becomes multinational, the demand for global ICT services increases. At NTT Communications, we work with our partners in Japan and overseas to provide seamless global services. By combining hosting, ICT outsourcing services, and high quality global network services such as IP-VPN and a Global Tier 1* IP backbone, NTT Communications provides unified high-value added services. Demands for ICT environments based on high quality networks are growing rapidly, particularly in the Asian region, and with the establishment of local affiliates, including operations in India and China, NTT Communications is pursuing strong business development under the banner of "Customer focus, global reach."

* A "Global Tier 1" is an Internet Service Provider (ISP) that possesses its own world-class broadband IP backbone, with which it can control the quality of its service without depending on upstream providers.

Global network (as of June 2006): Subsidiaries and affiliates in 52 cities in 16 countries

Arcstar Carrier Forum 2006 for Enhanced Service Quality Held in Collaboration with Overseas Telecom Companies

The Arcstar Carrier Forum (ACF) hosted by NTT Communications represents an approach for enhancing service quality among the participating companies with aims such as boosting end-to-end network quality. This year marks the 5th ACF held since 2000. Thirteen major Asian telecom companies come together once a year, providing an opportunity for staff and engineers engaged in activities, such as establishing new circuits, and operating and maintaining networks, to meet and share opinions and knowledge with the goal of improving network quality. ACF seeks to assist participating companies with boosting service quality and creating strong relationships of trust between providers, thereby ensuring smoother operations. Discussion at the forum this year extended to measures for improving quality in the delivery phase, culminating in a significant achievements in the form of a resolution to reduce delivery times, and raising the overall service quality.

NTT Communications will cooperate with ACF participants to implement operational policies, resolve outstanding issues, and meet the target for 2006 of providing high quality services globally.

Moreover, the Company will seek to increase the number of ACF participants in the future, and endeavor to improve the quality of communications in Asia.

■ Approximately 40 people participated representing 13 telecom companies from 9 Asian countries.

NTT Communications the First Carrier Based in Asia to Receive "Best Customer Care" Award at World Communication Awards 2005

NTT Communications is honored to have received the award for Best Customer Care at the World Communication Awards 2005* held in London in October 2005.

The Best Customer Care award recognizes the customer support capability of the Company. The high level of customer satisfaction with NTT Communications as well as the knowledgeable and flexible support provided by our highly skilled team contributed to the highest overall recognition. This is the first time for a Japanese or Asian carrier to receive this accolade.

* World Communication Awards 2005: Awards in 12 categories for outstanding telecom carriers, sponsored by Terrapinn. This year, winners were selected from 300 entrants by a panel of industry groups, consultants, and end user organizations.

Submarine Cable Laying Technology Also Used for Placing Seismographs

The NTT Communications Group builds and maintains a reliable and high quality a backbone network using a wide range of technologies. An example of such a backbone network is submarine cables that enable reliable communications with regions on the other side of the ocean. The Group company NTT World Engineering Marine Corporation (WE Marine) is a specialist team that lays and maintains submarine cables, and as such is a valuable presence from a global perspective. Not limited to domestic works, WE Marine offers its engineering technology to a wide range of operations from laying international telecommunication cables across the Pacific Ocean to construction and maintenance works in Southeast Asian countries and countries surrounding the Indian Ocean.

For an earthquake-prone nation like Japan, information from seismographs placed on the sea floor is an essential resource for prediction and research. However, a very high level of technical skill and experience is required to send a seismograph to a specific part of the sea floor over 1,000 m deep. Currently, the majority of ocean-bottom seismographs in Japanese waters were placed there by WE Marine (including its predecessor, the NTT Submarine Cable Engineering Center). In this way too, the technology of the NTT Communications Group makes its contribution to the peace of mind of Japanese society.

■ "Subaru", a submarine cable laying vessel

COLUMN

A World First: 40 Gigabit Per Second Large Capacity Network Control

Generalized Multi-Protocol Label Switching (GMPLS) technology is the focus of intensive research and development at telecom operators and networking equipment vendors around the world. This key network control technology will usher in more reliable networks featuring rapid network setting, automatic network restoration, and other advanced functions. NTT Communications deployed this technology in our backbone network, which was made available for demonstrations from companies exhibiting at Interop Tokyo 2006 held in June 2006. In collaboration with a number of networking equipment vendors, we successfully demonstrated a practical application of GMPLS technology for controlling a 40 Gbps*1 large capacity network, the first demonstration of its kind in the world. Based on the results of this demonstration, we intend to further enhance the reliability and sophistication of our networks.

In addition, in the sector of even larger capacity, terabit-class (1,000 gigabits) super networks*2, aimed at bringing broadband access to 40 million homes in support of the u-Japan concept, NTT Communications successfully carried out interconnection testing as the culmination of its terabit-class, super network research and development, which is part of the research sponsored by NiCT into advanced networks and broadcasting (October 2005).

*1: Gbps means data transfer rates and it refers to 10 to the 9th power (1,000,000,000) bits per second.

*2: A network that can transmit the amount of data equivalent to about 10 hours' worth of high-definition television images in approximately 1.0 second.

Towards a Safer, More Secure Society

We are working to ensure information security and thereby achieve a safer, more secure society.

Management and Systems for Ensuring Security

NTT Communications Security Declaration and Information Protection Policy

NTT Communications was one of the first companies to start work on a management framework for customers and other information. We realized that we could apply our own stringent security measures to improve security for our customers. In September 2002, we moved to protect our customers' privacy with the announcement of the NTT Communications Security Declaration and Information Protection Policy.

NTT Communications Security Declaration

Our most important mission, in addition to protecting information that is vital to our customers and providing services they know are safe, is contributing to an enhancement of our customers' security system.

We regard security as our top priority in providing services to our customers, and we pledge to work with them to achieve an optimum security system.

We will do our utmost to ensure security in all phases of the value chain from technology and service development to establishment and operation.

Furthermore, as Internet Professionals, each one of us will raise our capabilities to respond to security-related issues.
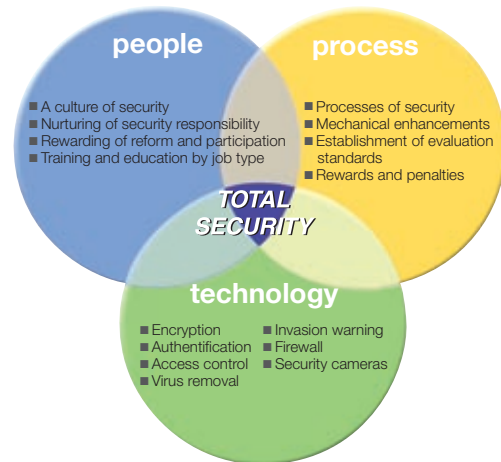
Three Resolutions

1. We regard security as our top priority in providing services to our customers, and we will do our utmost to enhance their security.
2. As an IT partner entrusted with our customers' vital information, we will work with them at all times to ensure their security.
3. Business partners and contract employees are also important supporting members of NTT Communications. We will therefore collectively strive to ensure our own security.

Information Protection Policy

1. Appropriate procedures shall be followed in the creation, accumulation, usage, and provision of information.
2. Measures shall be taken to prevent unauthorized access to and loss, damage, modification, or leakage of information.
3. All laws and regulations governing the handling of information shall be strictly observed.
4. Rules pertaining to the handling of information shall be properly organized and constantly reviewed.
5. NTT Communications shall ensure that all relevant personnel shall adhere to the document regulations pertaining to the handling of information.

Strengthening Total Security through the Trinity

People are both threats to and operators of security systems. Security measures that rely solely on technology are therefore inadequate. That is why we are strengthening our security through the trinity of people, process, and technology.
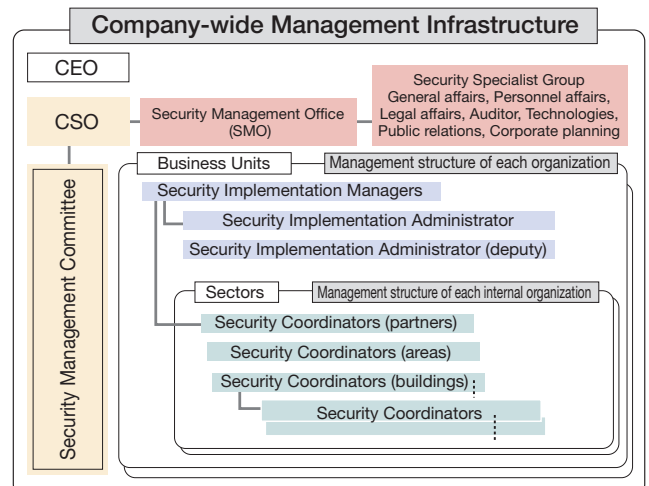

people
- A culture of security
- Nurturing of security responsibility
- Rewarding of reform and participation
- Training and education by job type

process
- Processes of security
- Mechanical enhancements
- Establishment of evaluation standards
- Rewards and penalties

TOTAL SECURITY

technology
- Encryption
- Authentification
- Access control
- Virus removal
- Invasion warning
- Firewall
- Security cameras

Security Management Promotion Structure

Under the direction of a Chief Security Officer (CSO) appointed by the President (CEO), a number of deliberative bodies have been established. The Security Management Office serves as an executive office for security matters, developing policy and management plans and deciding how to respond when incidents arise. In addition, the relevant key professional staff members can be assembled at short notice to respond to particular concerns.

Persons responsible for promoting security in each division attend training once a year. We foster specialist staff through practical training in the application of ISO 27001, the international standard for security management, and in responding to incidents. For regular employees, contract employees, and employees of outsourced companies, we enhance security awareness by providing posters, videos, handbooks, guidebooks, and other materials.

As for information security management systems (ISMS), with four divisions newly certified, 13 divisions by five scopes are certified in NTT Communications, and seven Group companies have also obtained certification as of March 2006. In addition, all divisions of NTT Communications have already obtained the Privacy Mark, while in fiscal 2005, four Group companies were able to obtain it.

Company-wide Management Infrastructure

CEO
CSO
Security Management Office (SMO)
Security Specialist Group
General affairs, Personnel affairs, Legal affairs, Auditor, Technologies, Public relations, Corporate planning
Business Units — Management structure of each organization
Security Implementation Managers
Security Implementation Administrator
Security Implementation Administrator (deputy)
Sectors — Management structure of each internal organization
Security Coordinators (partners)
Security Coordinators (areas)
Security Coordinators (buildings)
Security Coordinators
Security Management Committee

Measures We Take to Protect Our Customers' Information and Privacy

In order to protect our customers' personal information, besides implementing security management measures, the NTT Communications Group complies strictly with the relevant guidelines of the Ministry of Internal Affairs and Communications.

Risk is especially high in the management of electronic customer data. For such data, NTT Communications restricts access rights to the minimum persons necessary and carefully controls its use, granting permission to use the data only upon careful examination by the Security Management Office. We also turn our expertise in these examination processes to creating "information life-cycle management systems," eliminating the risk of leaks that arises from failure to destroy all traces of the information left behind on circuits by copying processes.

To prevent computers being taken outside the Company offices without authorization, we have built a detection system using electronic tags. We also maintain stringent controls on the outsourcing of handling of customer information. In such cases, we require such contractors to handle that information according to the same strict security standards that NTT Communications applies, and we conduct regular audits of those operations.

Creating a Society Where Communications Can Be Used with a Sense of Security

Working to Address Viruses and Internet Crime

Internet crimes such as unauthorized access through computer viruses and phishing scams are continuing to increase each year. For the NTT Communications Group, preventing these crimes is our highest priority, and we are making every effort to implement countermeasures. It is no exaggeration to say that the Internet is an environment where users are at risk every day. Therefore, to enable more people to enjoy the Internet safely and with reassurance, we provide free virus checking for outgoing e-mail and information about security measures presented via easy-to-understand web pages, among other similar services. These measures are taken from the viewpoint of society as a whole, going beyond a purely business perspective.

Network Security Monitoring and Operation Framework

There are all sorts of threats to network security, ranging from outside hacking attempts to viruses and worms, harmful software, denial-of-service attacks, and vast quantities of spam mail. To address these threats, using the monitoring capabilities acquired from being a leading telecommunications carrier, the NTT Communications Group carries out monitoring and other related operations 24 hours a day, 365 days a year.

Our Security Operations Center conducts various operations that are essential to providing security services for corporate networks. As a provider of outsourced security operations offering a wide range of monitoring services from office IT to private networks and servers, we safeguard our customers' corporate information systems by providing support for the infrastructure that enables our customers to carry on their business smoothly and without interruption.

In addition, at the IP Network Service Center, the division responsible for operation of Open Computer Network (OCN) facilities, every effort is being made to develop technical solutions to the various security issues encountered on the Internet. These efforts aim to address all issues of concern to users across the Internet, in cooperation with other ISPs.
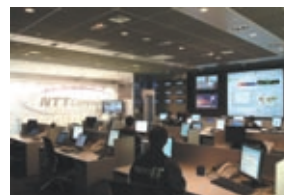
■Security Operations Center

Information Security Guide and OCN Security Portal Information Sites for Corporations

On the Information Security Guide website provided for a largely corporate audience, NTT Communications presents a wide range of security information. The key aspects and vocabulary of information security are covered for company employees who want to familiarize themselves with the issues, while the site addresses the latest trends in security and risk handling for security administrators. In addition, under the theme of business continuity, the site includes an explanation of the Business Continuity Plan (BCP) with a checklist. A specialist explains the main points required for creating a BCP, and there is other abundant content helpful for addressing business continuity.

Furthermore, on the OCN Security Portal, we provide the latest updates on Internet security for corporate customers as well as information on risks and countermeasures in an easy-to-understand manner. In particular, animation contents that allow users to experience simulated virus infection and phishing scams, and to try a simulation of OCN security services enable them to easily understand the nature of the danger involved and countermeasures to take. In addition, we provide a free security investigation service to clients that have installed the OCN corporate package.

■OCN Security Portal
http://www.security.ocn.ne.jp/
(Japanese only)

■Information Security Guide
http://sec.ntt.com/
(Japanese only)

OCN Anshin Web Information Site for Individuals and Security-Related Services

The OCN Anshin Web security site for individual users is primarily for those who have just started using the Internet and for intermediate users. Using actual examples, it explains the necessity of taking security measures and the trouble caused by Internet crime. The site offers a straightforward introduction to the points to be careful of and the specific steps required to protect your computer from unauthorized access and viruses. The links to websites about Internet security and related laws and regulations are also useful.

Computer viruses are a serious problem and nobody wants to be responsible for spreading them unawares. But it can be very difficult to take the right security measures yourself. For the five million OCN customers, NTT Communications provides a free virus check for outgoing e-mail and an online scanning service. In addition, we offer broadband users a free personal firewall service, among other services, in order to provide our users with safe and secure Internet access.

■OCN Anshin Web
http://www.ocn.ne.jp/info/anshin/
(Japanese only)

Proposals and Support for New Business Models and Lifestyles

We contribute to building a society in which all its various members can actively take part by working to create new community value through proposals and support for new business models and lifestyles.

Creating New Community Value

Ubiquitous Networks Make a People- and Earth-Friendly Society

In October 2005, NTT Communications launched Smart Biz Kit, using the Business FOMA® M1000 PDA from NTT DoCoMo. Smart Biz Kit can access e-mail file attachments using public wireless LAN hotspots and other access points, and with international roaming, it enables remote access from overseas. A feature of M1000 is that you can install applications, enabling expanded services like TV or phone conferencing. In addition, it can be used in combination with a range of business applications such as location-finding functions using global positioning system (GPS) peripherals.

Also, security functions like our proprietary Mobile Connect One-time Password (MCOP) authentication allow secure access to in-house systems, and if your PDA happens to get lost or stolen, you can prevent it from being operated with the remotely operated locking function, or delete data on it. In these ways, we are helping to strengthen protection against leaks of important data such as private information and other security issues.

Being able to exchange information in this way, anywhere, at any time, just as you can inside the office, is a good sign of the coming world of ubiquitous networks. Using business applications to enhance the convenience of PDAs, it will be easy to realize a "remote office" model, allowing you to visit customers directly from home without visiting the office first. The time saved in this way can be devoted to something else, and besides the benefit of this new freedom, there will be reductions in the amount of CO_2 emissions from transportation. Ubiquitous networks make a people- and earth-friendly society.

Working to Expand the Diversity of IC Cards

IC cards are becoming extraordinarily popular. We are continuing to expand the scope of their use, and at the same time, are undertaking challenging developments in many fields towards creating convenient new IC card applications and systems.

IC Card Authentication for Internet Banking

With Internet banking, there are always many security threats involved with the ID and password authentication system used by many banks, such as phishing and spyware. In order to resolve this problem, in May 2005 ShinGinko Tokyo, Limited introduced the NTT Communications IC card authentication system for Internet banking. This system performs user authentication using an IC card reader based not only on a password but also on a password and information from the IC cash card. In other words, should a password leak occur through spyware or other malware, unless the IC cash card is stolen at the same time, a third party cannot gain unauthorized access to the user's account.

In this way we are continuing to use the safety and security features of IC cards, expanding the scope of their use, and at the same time offering convenient, new applications and systems to contribute to the realization of a better life.

Introducing Multifunction IC Cards at the University of Tokyo

As part of our approach towards expanding the diversity of IC cards, we introduced NTT Communications eLWISE IC cards to the 40,000 students and faculty of the University of Tokyo in April 2005. IC faculty and student ID cards provide thorough information security management functions, and can be used for postpaid services on campus by incorporating a credit card function. At the University of Tokyo, they are now used for security authentication when entering buildings, management of attendance at lectures, lending of library books, and paperless management of health checkup records. In the future, a range of other applications are expected, such as access to facilities on campus, issue of transcripts, and electronic approval for faculty. Besides ensuring tighter security controls on campus, these IC cards will make a significant contribution to improving the efficiency of administration and the convenience of faculty and students.

.com Master: A Valuable Certification System for Training ICT Personnel

In today's business world, as the importance of ICT skills increases, there are more instances where standards for objectively determining skill levels are called for. The ICT skill certification system ".com Master" has been implemented by NTT Communications since 2001. There are three levels for certifying people with the ICT skills required for success in the business world ranging from Single Star, representing a skill level sufficient to provide directions and support to Internet service users, to the advanced Triple Star level.

In January 2005, we introduced Computer Based Testing (CBT) in .com Master Single Star certification. In addition to computer scoring paper tests offered twice a year, CBT is always available at over 200 locations throughout Japan, providing more opportunities to be certified.

In the eleventh .com Master tests held in July 2006, the cumulative number of test-sitters reached 220,000, of whom 70,000 passed. This system is being adopted as a useful corporate qualification tool and is also used as an indicator of skill levels in finding employment and doing business.

.com Master
NTT Communications

CAVA: The Home Call Center System

The NTT Communications Group company NTT Com CHEO Corporation operates CAVA, a .com Advisor & Valuable Agent system started in 2001 as home-based technical support for OCN service. CAVA allows individuals to choose the time and place they work, and to earn income according to the amount of work they do, while bringing up children or providing other care. This currently provides an employment opportunity for some 850 persons all around the country. This new work style has won acclaim from all quarters, and in 2005 it was awarded the 2005 Useware Grand Prix by the Japan Useware Association. This top award is in recognition of the most appealing service product or business model for that year from among companies providing user support services.

The Internet certificate examination ".com Master" is used as the criterion for CAVA staff skills. Class training is held nationwide twice a year to ensure that staff can respond when new services are introduced, thereby guaranteeing the quality of support as well as working to improve customer satisfaction.

Looking to the future, we intend to develop this business model and extend it to a wide variety of business categories in order to create further opportunities for employment.

■2005 Useware Grand Prix award ceremony

Comment from CAVA Staff

"I can return to being a mother as soon as my child gets home. Working at home is good, isn't it?"

Yuko Yamamoto
CAVA staff

I applied to join the CAVA staff when my child started going to school, and I wanted to start working again. Being able to work at home in your own time is very appealing to a mother.

When my child gets ill or when something suddenly comes up, I can deal with it without having to worry, and I can go back to being a mother as soon as my child gets home, so my family is happy, too. Plus, because there is no commuting involved you can use your time as you like, which is nice.

COLUMN

A Bridge of Friendship between Japan and China — The Chinese Information Site Café China

Currently there are more than 500,000 Chinese living in Japan, and it is said that more than 1 million Japanese are studying Chinese. In recent years the Chinese economy has made tremendous strides, and there has been an increase in personnel and cultural exchanges between Japan and China. Therefore, in response to the suggestion from Chinese employees at NTT Communications to help with cultural exchanges between the two countries, the Chinese information site Café China made its debut in July 2001. Café China provides information useful for Chinese living in Japan, such as news about China in Chinese, introductions to Japanese life and culture, Japanese language learning programs, bulletin boards for exchanging information, and other features. Also, for Japanese it is full of information that everybody wants to know about China, like information about employment in China, Chinese language courses, and domestic Chinese news in Japanese.

The PC site and mobile site together receive a total of about 70,000 hits a day. Looking towards the future, the NTT Communications Group will continue to provide information that contributes to mutual exchanges between the cultures of the world.
(Approx. 70,000 hits a day; PC website and Mobile website combined)

■Café China
http://www.hellonavi.com/
(in Chinese/Japanese)

Efforts in Becoming a Company Valued by Society

We work tirelessly to earn the trust of the public, always mindful that we are members of communities. We contribute to and live alongside the development of both local and international communities as well as the Internet community.

Social Action and Principles

Sustainability : We pursue activities that can be maintained continuously, taking a long-term, conservative view.

Efficiency : We endeavor to undertake activities with high cost-effectiveness in order to maintain them without incurring waste.

Due diligence : When we make a donation, we carefully consider whether or not it is of real social value.

World view : We contribute not just in Japan but to the international community as well.

Skills : We make our services and the skills of employees developed in the information communications market useful to communities.

Contributing to Regional Communities

Enriching the Community and the Individual

Easy Internet Classes that Benefit the Individual and the Community

The Social Contribution Working Group, inaugurated in 2004 to enable NTT Communications employees to plan and carry out social contribution measures on their own initiative, continued the Easy Internet Classes with the aim of eliminating the digital divide.

The 4th Class was held with the cooperation of Iitate Village in Fukushima, to span the digital divide in a depopulated village that is shut off by deep snow in the winter. This was the first class to be held in a rural area. Thirty-two people responded to the announcement for the class, with participation from elementary school children to seniors in their 70s. Together they learned how to make a blog with 15 volunteers from the Company. Those who took part were very satisfied with the program, and when filling in the questionnaire after the class, 100% of the participants responded that they enjoyed it.

The 5th Class was conducted with an Internet Protocol television (IPTV) phone link between Japan and Afghanistan, with cooperation from Peace Winds Japan (PWJ), a non-profit organization (NPO) that provides emergency assistance in all regions of the world. Twenty-one people took part, including elementary and junior high school children and their parents. After learning background knowledge about Afghanistan from the Internet, they put questions to Reiko Hirai from the PWJ Afghanistan office. The first question that the children asked her was, "What do you think Japan can learn from Afghanistan?" Ms. Hirai answered, "I feel that Japan has come to take peace for granted." The adults who took part also seemed moved by this exchange. In the blog-writing class at the end, the children wrote their impressions of the day. In their blogs the children wrote frank comments like: "It's fantastic that we can talk to people in a faraway country over the Internet!" and "I want to learn more about Afghanistan." The program gave them a real sense that using the Internet can bring the world closer.

For fiscal 2006, we are planning to run a program for refugees living in Japan, and we intend to continue to take active steps in the future towards bridging the digital divide.

Key Events to Date

The 3rd Easy Internet Class
- Let's try making New Year Cards using the Internet!
November 19, 2005, NTT Azabu Seminar House

The 4th Easy Internet Class
- Let's make a blog!
February 4, 2006, Iitate Village, Fukushima

The 5th Easy Internet Class
- Let's learn about the world using the Internet!
June 24, 2006, NTT Azabu Seminar House

■ A Company volunteer assisting participants one on one

■ (5th Easy Internet Class) Reiko Hirai and children in Afghanistan

Comment from the Cooperating Local Authority (4th Easy Internet Class)

Makoto Sugioka
General Affairs Section
Iitate Village Office

"The class was very effective in bridging the digital divide."

Iitate village is the very image of a mountain farming village surrounded by nature and greenery, located on the northern edge of Abukuma Mountains in Fukushima Prefecture. But the village has been slow to establish an IT infrastructure, and bridging the digital divide has become a serious problem.

We thought it was a good chance for the villagers to learn how to publish information easily, starting with the means already available to them, and so we held the Easy Internet Class sponsored by NTT Communications.

The response exceeded our expectations. After the class, there were people who put up a blog right away (in their 50s!), and people from the village and from outside who got in touch to ask us when the next class would be. As an administrator, I want to investigate our ICT needs further, and bring this to bear on the policies and running of the village.

■ Operational Backup for the NPO Database, NPO Hiroba

Demands for more information on the operations of NPOs in each region and category are mounting on a daily basis. In every community, more and more people want to know more about NPOs working to provide social services and improve life in their community. Others want to know how to contact NPOs that support the arts in specific regions. Still others who are solicited for donations by an NPO engaged in nature conservation may wish to compare its performance with those of similar NPOs to make decisions.

To provide a forum for dialogue between the community, NPOs, and private enterprises, in April 2001 the Japan NPO Center* established NPO Hiroba. NPO Hiroba is a website that incorporates a searchable database listing nationally accredited NPOs in Japan. NTT Communications launched the NPO Hiroba site and provides ongoing operational backup for the site using SecureSmartAccess, the Company's exclusive online service. With NPO Hiroba, information about the activities and current status of NPOs and other community organizations is now at everyone's fingertips. This unique resource enables any interested citizen or enterprise to learn about and take part in NPO activities, contributing to the development and growth of NPO activities across Japan.

•Total number of organizations registered on NPO Hiroba (as of August 2006):

The 26,363 accredited NPOs as of March 31, 2006 in Japan were all registered by August 2006 whereas 3,150 were registered at the time of establishment of NPO Hiroba.

* Japan NPO Center: The center was established to provide a strong base for the activities of NPOs that transcends divisions of category and region, supporting these organizations' efforts to build a better society for all, and to establish a partnership between private enterprises, government, and regional organizations.

■NPO Hiroba
http://www.npo-hiroba.or.jp/
(Japanese only)

■ Used-PC Donation Program

As a company that contributes to the community as well as undertaking environmental protection and recycling, NTT Communications Corporation has donated a total of 1,490 PCs that are no longer used in the Company to regional agencies and NPOs.

In October 2003 and in December 2005 respectively, 793 and 98 used PCs were donated to joint workshops and NPOs for persons with disabilities across Japan through e-elder, an NPO.

The work of refurbishing the PCs was entrusted to organizations such as Yume Group Workshop, a social welfare corporation that operates workshops employing persons with disabilities. Here, the PCs are refurbished to like-new condition and the data on the hard disks is returned to when it was first installed, creating employment opportunities for persons with disabilities. We intend to continue carrying out this program into the future.

Efforts in Becoming a Company Valued by Society

JOLLY'S magazine, a Support Website for Guide Dog Training

The JOLLY'S magazine site on OCN presents a wealth of information about guide dogs, as well as raises funds online to support the activities of the Japan Guide Dog Society, which conducts a range of activities aimed at enabling the blind and visually impaired to participate fully in their communities. Visitors to the site can select the amount they wish to donate, ranging from ¥100 to ¥1,000, and submit payment using the OCN Pay On* electronic payment service. To encourage giving, the site offers all donors selected OCN original content free of charge.

As of August 2006, donations to the Japan Guide Dog Society have topped ¥3 million, for which the Japan Guide Dog Society and NTT Communications are sincerely grateful.

*OCN Pay On: This payment service allows subscribers of OCN to purchase digital content and pay service fees along with their regular OCN charges. The system is simple and easy to use, as subscribers simply enter their OCN ID and password—no extra procedures are required.

■JOLLY'S magazine
A support website for guide dog training
http://www.ocn.ne.jp/jolly/charity/
(Japanese only)

NPO Accessibility Support Program Contest

As part of its activities to promote the accessibility of information, services, and software for senior citizens and persons with disabilities, NTTPC Communications Inc., started its NPO Accessibility Support Program contest in July 2005. This was planned in conjunction with the NPO e-elder, and NPOs around the country were invited to submit proposals for improving the accessibility of their websites in a contest format, with the winning programs being awarded a financial contribution for building the site and related support.

For the first competition, there were 59 applications from NPOs ranging from public health, medical, and welfare related groups to NPOs involved in community building and social education. From among these, 14 groups were selected and subsidies were provided for their activities. Moreover, with interest growing in these specific activities for bridging the digital divide, sponsorship for the program was obtained in 2006 from the Information and Communications Policy Bureau of the Ministry of Internal Affairs and Communications (MIC), the Mainichi Newspapers, and other backers. The Company will continue the program in the future.

■NPO Accessibility Support Program award ceremony

Tours of the Submarine Cable Laying Vessel "Subaru" and Submarine Cable Archives

As a company that lays submarine cables, NTT World Engineering Marine Corporation (WE Marine) offers tours of its submarine cable laying vessel "Subaru" between operations in order to publicize its mission in linking regions separated by the oceans. In fiscal 2004, the ship was opened for tours before starting operations to lay optical cable between the main island of Okinawa, Miyako Island, and Ishigaki Island. Some 200 local people came aboard the ship, including students and local residents. The visitors appreciated this rare opportunity to see uncommon equipment such as the onboard cable tank, filled with coils of optical cable, burying equipment, and underwater robot, gaining a valuable insight into the work of laying submarine cables.

Moreover, WE Marine has established the Submarine Cable Archives in Nagasaki, the home port of the "Subaru," with exhibits on the methods and history of submarine cable laying operations. Tours of the museum are provided. Built in 1896, the building which houses the museum is a rare example of Meiji Period brick architecture and is designated as a protected cultural property of Nagasaki Prefecture.

■Children enjoying a tour of the bridge

■Interior view of the Submarine Cable Archives

■Exterior View of the Submarine Cable Archives

◾ Confectionery Made at Workshops for Persons with Mental Illness Sold in Company Kiosks

At NTT Communications, confectionery produced at joint workshops for persons with mental illness is sold in kiosks within the Company around St. Valentine's Day and on similar occasions.

With this small step, begun in 2004, employees are helping to support the self-help activities of persons with mental illness by the simple and enjoyable act of purchasing hand-made, delicious confectionery. Besides gaining popularity for its taste, the confectionery also attracted the employees' attention to the pamphlet of the joint workshops placed in the sales booth. An employee commented, "I feel my view has widened, now that I know there are so many people with mental health problems and yet so cheerful and forward-looking, which

makes me encouraged, too." NTT Communications will continue this event in the future as one of the steps of our social contribution in which everybody can take part easily.

◾Employees buying confectionery at a Company kiosk

⬛ Comment from NPO Staff

"Nothing is more encouraging than to hear that it tastes good."

Ryoko Kogure
Staff Member
"2nd Work in Asuka" Joint Workshop
for Persons with Mental Illness
(Parent Organization: Asukakai NPO)

Mental illness is something that can happen to anybody, and there are about 2.6 million people in Japan with mental health problems at present. Not only is it difficult for sufferers to recover from their condition and return to a normal life, there is also little understanding of mental illness in society as a whole. Joint workshops play an important role in helping with this rehabilitation, allowing people to get back into the rhythm of life and providing training for finding work. Our activities at "2nd Work in Asuka" joint workshop are focused on producing and selling cakes and other sweets.

When we first visited NTT Communications, it was our first experience of selling to a major corporation, and we had no idea how it would go. Three of our workshop members and two staff members went to NTT Communications in quite a state of trepidation. Thanks to the publicity provided in advance

by the Company, sales went very well, and our special confectionery for St. Valentine's Day, as well as our regular pound cakes, brownies, and cookies sold out in just two hours. We and the workshop members were very glad that we went to all the trouble. When we reported back to the members who stayed back at the workshop making cakes, they were amazed and thrilled at how good sales were.

Having the opportunity to sell our goods at a public company market not only expanded our market, it brought our members greater confidence. It was also important in raising awareness and understanding of the activities of our workshop. I hope that through further opportunities like this in the future, the scope for participation by people with mental illness will increase, and prejudice against them will gradually fade away.

Becoming a Global Corporate Citizen

⬛ Local Initiative to Stay Connected

◾ Matching Gift Program: Activities at Overseas Group Companies

Twice a year, NTT America, Inc. raises funds through in-house sales of goods carrying the NTT Communications logo. Proceeds from the sale and the company's matching gift go to the United Way, a coalition of charitable organizations operating worldwide, which collects contributions from local communities and distributes them according to local priorities.

This charity sale program helps the Company to raise more funds for the organizations, as corporate donations are added in propotion to employee donations made through purchasing merchandise.

The matching gift arrangement is a commonly used approach in the

United States to encourage employees to support charitable causes, empowering them with the knowledge that they are playing an active part in driving the donation process forward.

NTT America's year-round matching gift program to support

◾NTT America employees wearing shirts featuring the shining-arc logo

individual philanthropic contributions of employees has also been very successful and nicely complements the company's charity sale program.

◾ Supporting Special Free Dial Services for Refugees

The Japan Association for Refugees is an NPO that provides direct support for individual refugees staying in Japan. Every month, the association receives urgent enquiries from many refugees. Refugees may have no money at hand, and to enable them to consult the

association by phone without worrying about the cost, NTT Communications set up a special free dial service for refugees (0120-477472, domestic calls only), defraying part of the cost of operation. We started providing this service on April 12, 2006.

⬛ Comment from the Japan Association for Refugees (NPO)

"The free dial service lets us communicate with refugees."

Shiho Tsutsui
Secretary General
Japan Association for Refugees (NPO)

As in other countries, refugees are fleeing persecution in their own countries and coming to Japan from overseas, and every year more than 300 people seek the protection of the Japanese Government. Many of these refugees have nobody to rely on, and because they don't understand Japanese, they find it hard to communicate. They face many barriers like not knowing how to get information about the procedures for applying for asylum.

Right after the special free dial service for refugees was

set up, as we had hoped, we got comments from the refugees like, "I'm glad that I can consult you without having to worry how many coins or phone card points are left." Also, "When I have to save on food everyday, it's a real help that my phone charges are less." I'm grateful that NTT Communications carried out a project like this as part of their social contribution activities, and I hope this program will be an opportunity for NTT Communications employees to take an interest in the refugee problem.

⬛ COLUMN

Social Contribution Pages on Our Website (http://www.ntt.com/community/)

See our website for details and updates on NTT Communications' social contribution activities (Japanese only).

Measures that NTT Communications Developed to Combat Global Warming Recognized as an Excellent Example by Tokyo Metropolitan Government

New energy-saving concept for air-conditioning systems focuses on controlling immediate climate of communications equipment rather than the entire room.

Aiming to Reduce Power Consumption, 90% of Which Is Used in ICT Equipment

Tokyo Metropolitan Government Working to Enhance Measures to Fight Global Warming

Electric power is a key resource for the telecommunications industry. Long before global warming prevention measures emerged as a pressing social issue, the NTT Group started work promoting its Groupwide Total Power Revolution (TPR) activities and has continuously made efforts to save energy.

In addition to the TPR campaign, NTT Communications has also established CO_2 reduction targets and adopted a series of original measures in an effort to reduce power consumption. Consequently, a global warming prevention plan developed by NTT Communications' main building in Otemachi that places particular focus on energy reduction measures received high accolades from the Tokyo Metropolitan Government (TMG)'s system for fighting global warming and was introduced as an excellent example in the local body's website. This system was commenced in fiscal 2005 by TMG, and our plan was selected from approximately 1,000 such plans regarding greenhouse gas reduction submitted over a five-year period by major offices from throughout the capital.

Reducing the Amount of Energy Used to Control the Climate of Equipment Rooms

Some 90% of the energy consumed in the course of NTT Communications' entire business is used by ICT equipment such as converters, servers, and routers, as well as the cooling equipment needed to ensure their smooth operation. While such networks have in recent years become increasingly integrated, their equipment, which is typically stored in communications equipment rooms, is generating more heat than before due to their generally greater levels of energy consumption. Single rack energy consumption levels, for example, have increased to 2-4kW or even 6-8kW in some cases, as opposed to 0.4-0.6kW recorded some 20 years ago. Furthermore, equipment that generates high levels of heat is increasing with the advance of Next Generation Networks (NGN)[*1]. Effective cooling systems are therefore essential to ensure the proper management of such networks. In doing so, companies are employing systems whereby large-scale air conditioning systems are installed in all equipment rooms to absorb the heat output of computers. The entire room is cooled in such systems so that a person cannot stay long.

NTT Communications has always worked independently to raise the efficiency of its air-conditioning systems. Related efforts to date have seen the development of the MACS air-conditioning system[*2] as well as a special cooling fan, which efficiently cools equipment rooms while using significantly less energy. We have also developed a specialized remotely controlled temperature monitoring system that enables temperatures in equipment rooms to be centrally controlled on a real-time basis. The aforementioned main building of Otemachi is one of the working examples managed by the centralized temperature control system.

*1 NGN: Next-generation network that utilizes IP and spreads all over the telephone network

*2 MACS air-conditioning system: Cooling system developed for use in equipment rooms that generate exceptional levels of heat

Cold Air Released after Absorbing the Heat of Communications Equipment

Eliminating Inefficiency of Cooling the Entire Room

The MACS air-conditioning system employs an efficient cooling method whereby cool air is sent only to the areas that need it. Very cold air sent from an indoor unit to beneath the double flooring directly under equipment racks absorbs heat as it passes through the racks before being

MACS air conditioner (indoor unit)　　Closed rack　　Open rack

Double flooring
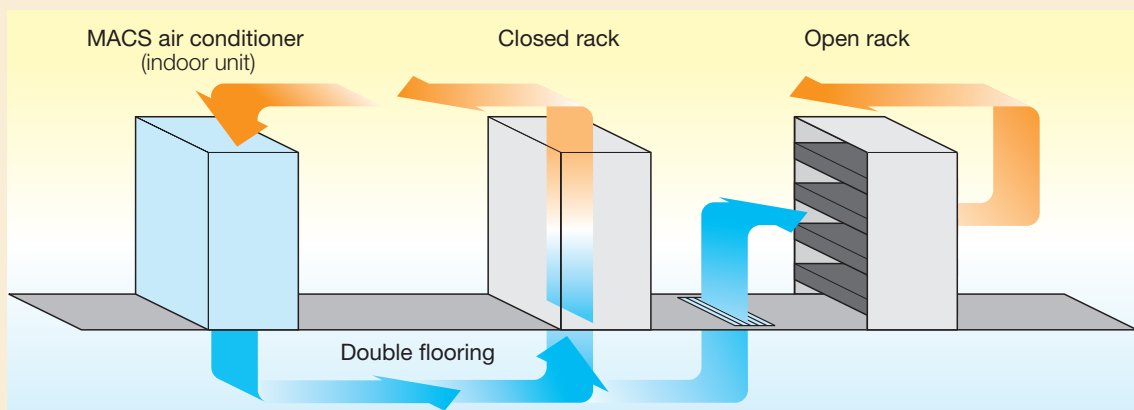
■How the MACS air-conditioning system works

released into the room. By concentrating cool air to where it is needed, the MACS system effectively reduces the burden of having to cool the entire room.

Because the amount of heat generated by equipment stored in racks varies, we installed cooling fans along the air intake route of racks that generate higher heat levels ("heat points") so that the appropriate temperature is maintained across the board.

■Equipment racks in a communications equipment room

Real-Time Temperature Monitoring of NTT Communications Equipment Rooms across the Nation

Our temperature monitoring system is another crucial element in our efforts to reduce power consumption.

The temperature monitoring system in Tokyo unifies the management of room temperatures in the equipment buildings and data centers that NTT Communications owns in about 70 locations nationwide. Remote controlled supervision technology covering wide areas by the

utilization of telecommunications networks is one of NTT Communications' major strengths in the technology field.

When the temperature at any of the given monitoring points exceeds a set heat level, an alarm alerts staff, who then verify the exact location and assess whether the temperature rise is due to the activity of a specific rack or the overall air-conditioning system. This enables the appropriate measures to be taken quickly by taking advantage of our finely tuned temperature control technology using remote control.

Legend ● appropriate temperature ● heat point
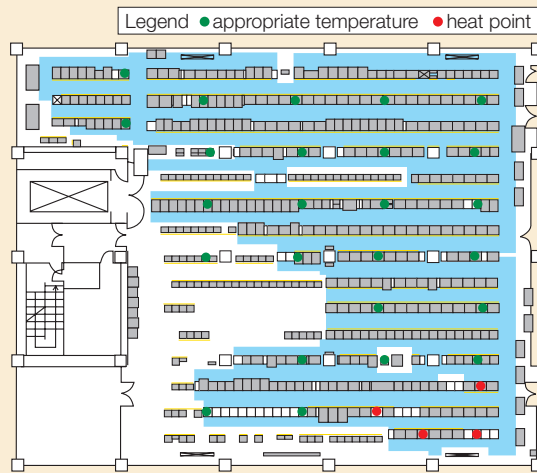
■Screen image of temperature monitoring system

Maintaining Equipment Rooms at the Right Temperatures

Solid Environmental Measures Integral to Achieving High Level of Reliability/Trust and Cost Reduction

NTT Communications has positioned "the environment," "reliability/trust," and "cost" at the forefront of its efforts to reduce power consumption.

Prior to April 2003 when our proprietary temperature monitoring system was installed, each communications equipment room was monitored in each building by specially appointed staff who would report the status at any given time to a central control room. The introduction of the temperature monitoring system has therefore led to tremendous labor savings as well as reduced management costs. In addition, since the alarm mechanism enables central monitoring staff to grasp the situation from a macro perspective, information-gathering capabilities are enhanced, which in turn helps prevent system malfunction and stabilizes the overall provision of services. At the same time, the system boosts service quality and reliability by way of improved response to malfunctioning.

Moreover, the system has been proven to have a positive impact on energy-saving levels, as evidenced by a test of approximately 700 of the 4,000 air-conditioning units used in NTT Communications' equipment rooms nationwide. By

raising the temperature setting of communications equipment rooms by just 1ºC, a 2% reduction in power consumption was achieved. That translates into a saving of roughly 1,900kW.

As well as the high praise of the TMG, the system has also won the approval of regional branches of the Ministry of Economy, Trade and Industry, which awarded all 16 NTT Communications' buildings nationwide more than 90 points. At the time of inspection, one METI official was overwhelmed by the temperature difference of an NTT Communications equipment room compared to equivalent rooms of other companies. Upon entering the room he said, "This room is not cold," and showed an active interest, asking, "What kind of measures are you taking?"

Working for the Development of the Ubiquitous Information Society and the Protection of the Global Environment

On the back of current measures, there is a history of innovations that we have made as the entire NTT Group in an attempt to reduce CO_2 emissions, including switching to direct current power supply to realize energy savings and the development of super capacitors for greater efficiency of outdoor units for air-conditioning systems.

"Communications equipment rooms in the buildings in city centers will become more integrated," says a staff member in charge of promoting current energy efficiency measures. "We appreciate the fact that our business activities are becoming prosperous. At the same time, however, I am constantly aware of a sense of mission to make our utmost efforts by being aware that our business activities are having an impact from the perspective of the global environment. It is a great pleasure to have gained recognition from the Tokyo Metropolitan Government as an excellent example of the industry, in which the energy load is increasingly rising."

These measures are only part of our activities that we conduct under the theme of global environmental protection.

Measures against Global Warming at NTT Communications Main Building in Otemachi

Composition of CO_2 Emissions in FY2005			CO₂ Reduction Measures Planned by 2010	
Sources	CO_2 emissions amount		Measures	Projected reduction amount (t-Co2)
Electricity	41,558		Introduction of MACS system, etc.	2,607
Fuel and heat	9		Introduction of redundant UPS	662
Water system	12		Introduction of super capacitors*	166
Other	0		Change in temperature settings	55
Total	41,579		Update of low wattage inverter stabilizer	13
			Appropriate control of fresh air intake	8.5
			Update of energy-saving fan belt	5.4

*Equipment for greater efficiency of cooling systems

Basic Approach and Structure of Environmental Protection Activities

NTT Communications actively pursues global environmental protection in all aspects of its business operations and contributes to the creation of an environmentally friendly society through providing information and communications services.

Basic Philosophy and Policies

NTT Communications Global Environmental Charter

The NTT Group announced its NTT Group Ecology Program 21 and the NTT Group Global Environmental Charter to frame its thoughts and actions on environmental preservation from a global perspective. NTT Communications supplemented these announcements with the NTT Communications Global Environmental Charter, which underpins our Long-Term Environmental Vision, formulated in November 2004, as well as the Medium- and Long-Term Plan.

NTT Communications Global Environmental Charter

Basic Principle

NTT Communications will actively pursue environmental protection in all aspects of our business and contribute to the creation of an environmentally friendly society by creating and providing the best global services to benefit all customers.

Basic Policies

The following policies for environmental protection apply to all corporate activities of NTT Communications.

1) Fulfillment of corporate responsibilities

NTT Communications observes all domestic and international laws and regulations regarding environmental protection. In addition, we evaluate the environmental impact of our corporate activities, strive to prevent environmental pollution, and continually upgrade our goals and strategies for saving energy/resources and decreasing waste.

2) Support activities that help realize an environmentally friendly society

NTT Communications contributes to the realization of a human-friendly and low environmental impact society by developing and providing network services to bring about new lifestyles. This includes support for telecommuting and the provision of an information platform for environmental protection and recycling.

3) Contribution via environmental activities

NTT Communications joins hands with local residents and governments to support everyday activities aimed at protecting the environment.

4) Disclosure of environmental information

NTT Communications discloses corporate information related to the environment and encourages communication with people both inside and outside the Company.

Medium- and Long-Term Plan and Objectives

NTT Communications' View for the Future

Based on its Long-Term Environmental Vision, as well as the Medium- and Long-Term Plan, NTT Communications is steadily achieving specific targets set to realize the broader goal of developing operations that are friendly to people and the environment, while leveraging its wealth of ICT expertise to partner with government organizations, educational institutions, NGOs/NPOs, and other companies.

· NTT Communications sincerely believes that humanity has a duty to return the Earth to an environment that supports our perpetual coexistence with other living creatures.

· The task of repairing the environment extends across all fields of human endeavor, embracing politics, business, education, and culture. We must transform our values, eschewing the single-minded pursuit of physical wealth in favor of new values that place priority on maintaining the precious natural environment.

· To change the world by transforming its shared values will require a worldwide process of dialogue and a concerted effort at mutual understanding.

· At NTT Communications, it is our conviction that, by capitalizing on our global communications network and cutting-edge communications technology, we can make a difference in bringing about a sustainable, spiritually and materially wealthy world society. We can do this by creating a shared platform for worldwide dialogue, exchanging and sharing knowledge from across the world and across history, and by supporting clear and open communication among all the world's peoples.

This is our long-term vision for the environment. By bringing industry, government, academia, and other communities together on a global scale, we believe that we can drive this essential process forward.
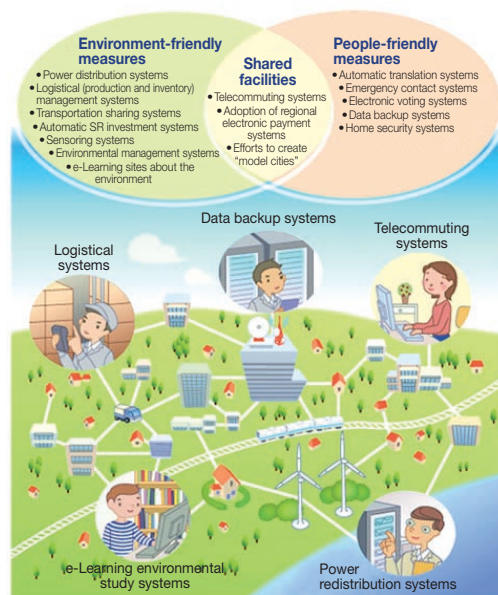
Medium- and Long-Term Plan: Measures and Targets for Reducing the Environmental Load

In order to reduce the environmental impact of our business activities, we have established specific measures and targets for each individual issue, including environmental management, the reduction of harmful wastes, recycling and energy saving, and global warming prevention. With regard to CO_2 emissions, which is one of the greatest burdens our operations place on the environment, we are upgrading our air-conditioning systems and introducing various clean energy projects. As for specific measures to reduce harmful wastes, we are focusing on boosting recycling rates for communications equipment withdrawn from the market.

Environmental action theme	Key measures	Activities and targets	Target year
Improving environmental management	Promoting environmental education	Organization of training systems for employees, provide education on preserving the natural environment, field studies, etc.	Planned initiatives being sequentially implemented
	Implementation of various qualification/certification systems	Support for certification under ISO 14001 and similar systems	
Reducing harmful wastes and recycling	Paper-saving measures	Reduction of virgin pulp consumption to half of the FY2003 level, or 37.5t	2010
	Reducing and recycling office waste	Sorting and recycling of trash Raising of the recycling rate to 70%	2010
	Recycling dismantled communications equipment	Recycling of dismantled communications equipment and used optical cables Raising of the recycling rate to 99%	2010
	Recycling construction waste	99% recycling rate for specific materials Raising of the recycling rate for other materials (except sludge) to 84%	2010
Energy-saving measures and measures to combat global warming	Reducing CO_2 from power consumption	Reduction of CO_2 emissions to 370,000t •Improvement and upgrade of air-conditioning equipment •Upgrade of inefficient equipment •Introduction of energy saving and clean energy systems	2010

Medium- and Long-Term Plan: Working to Become an Environment-Friendly, People-Friendly Enterprise

Focusing on our five core business areas—ubiquitous networks, security, solutions, network management, and global operations—we offer environment- and people-friendly services to contribute to society.

Environment-friendly measures
• Power distribution systems
• Logistical (production and inventory) management systems
• Transportation sharing systems
• Automatic SR investment systems
• Sensoring systems
• Environmental management systems
• e-Learning sites about the environment

Shared facilities
• Telecommuting systems
• Adoption of regional electronic payment systems
• Efforts to create "model cities"

People-friendly measures
• Automatic translation systems
• Emergency contact systems
• Electronic voting systems
• Data backup systems
• Home security systems

Logistical systems · Data backup systems · Telecommuting systems · e-Learning environmental study systems · Power redistribution systems

Framework for Promoting Environmental Protection

Strengthening Environmental Management throughout the NTT Communications Group

In order to continuously carry out activities to protect the global environment, which is one of our basic CSR policies, NTT Communications has established working groups comprised of environmental professionals and is strengthening environmental management throughout the Group led by the president and with the working groups at its core. As a result of the Group's penetrating management structure, working groups were newly established in six Group companies in fiscal 2005.

The NTT Group Global Environmental Protection Promotion Committee also spearheads a number of NTT Communications' environmental protection activities. This committee regularly liaises with working groups set up to deal with specific issues and drives a battery of activities aimed at reducing the environmental impact of the entire NTT Group.

Working group	Main issues
President → **Environmental Protection Office**	
Working Group on Reducing Greenhouse Gases	•Promote Greater Energy Management through the Total Power Revolution (TPR) Campaign (Formulates efforts to reduce power consumption; stabilization at 1990 levels)
Working Group on Dismantling Communications Equipment	•Appropriate processing and management of equipment dismantling as required by law
Working Group on Construction Waste	•Appropriate processing and recycling of construction-site waste •Elimination of asbestos and thorough reconstruction progress management
Working Group on PCB Storage and Disposal	•Appropriate storage and dissolution and processing of PCBs •Compilation of reports to government on the status of PCB management
Working Group on Office Waste	•Appropriate processing and management of office waste as required by law •Thorough sorting and collection of office waste •Activities to reduce consumption of office paper (promotion of paper-saving activities, use of recycled paper and electronic media)
Working Group on Customer Waste	•Appropriate processing and management of industrial waste generated by installation projects contracted from customers
Working Group on Container Recycling	•Thorough observance of the Container Recycling Law
Working Group on Green Procurement	•Companywide implementation of green procurement
Working Group on Environmental Accounting	•Introduction of environmental accounting beginning in FY2002 •Examination of measures for implementation of environmental accounting in management
Community-service activities related to environmental protection	•Printing of business cards using kenaf (To help ease deforestation, the Company is switching to 100% use of kenaf instead of wood pulp)
Group company working groups	•Expansion of aforementioned working group activities within respective companies and expansion of PDCA (Plan-Do-Check-Action) cycle

Environmental Impact of Our Business Activities and Protection Measures

By understanding the environmental impact of our operations, we are striving to achieve fiscal 2010 targets.

Inputs and Outputs of the NTT Communications Group (Fiscal 2005)

IN PUT

- •Communications equipment
- •Communications cables, etc.

Green procurement guidelines

- •Power: 843.17 million kWh
- •Fuel: 12.81 million liters
- •Gas: 5.48 million m³

TPR campaigns

- •Power: 31.23 million kWh
- •Water: 480,000 m³
- •Paper (office paper): 135t

Achievement plan

- •Paper (pamphlets): 946t
- •Fuel (vehicles): 260,000 liters

Idling stop campaign

Procurement → **Communications facilities** → **Office** → **Sales** → **Customers**

OUT PUT

Reuse
In-house reuse of dismantled equipment: 576 items

Recycle
Reuse of optical fiber cable: 63.3km

- •Greenhouse gases
  Power used: 320,000t-CO_2
  Fuel used: 17,000t-CO_2

- •Waste Products
  (Total emission volume)
  Industrial waste: 3,501t

- •Greenhouse gases
  Power used: 12,000t-CO_2

- •Waste Products
  (Total emission volume)
  General waste: 3,399t
  Industrial waste: 735t

- •Greenhouse gases
  Fuel used: 620t-CO_2

- •Waste Products
  (Final disposal volume)
  Industrial waste: 50t

- •Waste Products
  (Final disposal volume)
  General waste: 941t
  Industrial waste: 18t

Targets and Results

		FY2005 targets	FY2005 results	Self-Evaluation	Activities for FY2006	Medium- and Long-Term Targets (FY2010)
CO_2 emissions		355,000t-CO_2 or less	349,000t-CO_2 •Introduction of super capacitors: 122 units •Elimination of radio relay stations: 2 locations •Renewal of facilities (air conditioning systems, etc.): 47 units •Implementation of "Cool Biz"	🍃	Target: 355,000t-CO_2 or less •Introduction of super capacitors: 80 units •Elimination of radio relay stations: 14 locations •Renewal of facilities (air conditioning system, etc.): 24 units •Implementation of "Cool Biz"	370,000t-CO_2 or less
	Recycling rate for dismantled communications equipment	98% or higher	98.7% (3,501t) •Promote consignment to vendors capable of recycling	🍃	Target: 99% or higher •Thorough consignment to recycling contractors	99% or higher
Waste	Recycling rate for construction waste	Specific materials: 98% or higher Other: 62% or higher	Specific materials: 93.6% Other: 71.2% (Total waste volume: 1,862t) •Verification of intermediate treatment facility according to construction and verification of actual recycling volume	🍃	Target: Specific materials: 98% or higher Other: 74% •Specify the selection of facilities with high recycling rates •Promote the establishment of management structure by construction	Specific materials: 99% or higher Other: 84% or higher
	Recycling rate for office waste	52% or higher	51.5% (Emissions: 4,134t) •Select contractors with high recycling rates •Thorough waste separation •Collection and recycling of cans, glass bottles, PET bottles	🍃	Target: 57% or higher •Select contractors with high recycling rates •Further reinforce waste separation	70% or higher
Virgin pulp consumption (Office paper)		70t or less	135t •Raise employee awareness not to wastefully use paper •Measures to reduce paper use (OA) Double-sided print 2-in-1 prints	🍃	Target: 70t or less •Strengthen procurement of recycled paper •Additional measures to reduce paper use	37.5t or less

Self-evaluation 🍃 = Favorable results   🍃 = Roughly on par with plan   🍃 = Slightly delayed

Energy Saving and Global Warming Prevention

NTT Communications is promoting a broad range of activities that help to prevent global warming, including energy saving of ICT equipment that accounts for 90% of the total CO_2 emissions of our business activities, as well as equipment each employee uses every day both in the office and at home.
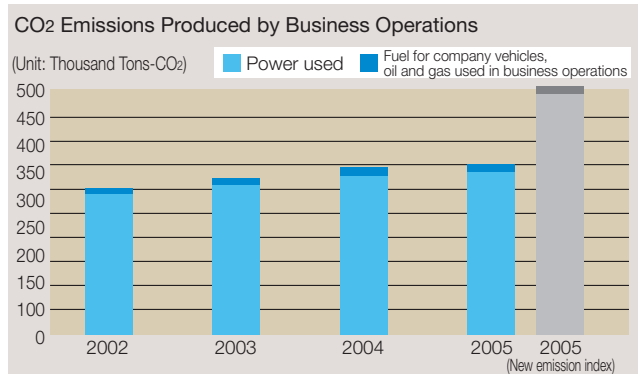
Controlling CO_2 Emissions by Upgrading Power-Supply Equipment and Air-Conditioning Systems

A stable power supply for communications equipment and air-conditioning systems for communications equipment rooms is essential to providing high quality communications services. At NTT Communications, we replaced our previous less-efficient power supply equipment to an uninterruptible power supply (UPS) system, which is 2-5% more efficient. Regarding air-conditioning systems, we introduced MACSV, a system around 17% more efficient than the previous one. Additionally, we will undertake further efforts to scale down our energy-consumption profile through original measures to prevent global warming (see pages 18-19)—recognized by the Tokyo Metropolitan Government as an excellent example of efforts in this area—and, in turn, continuously restrict our CO_2 emissions.
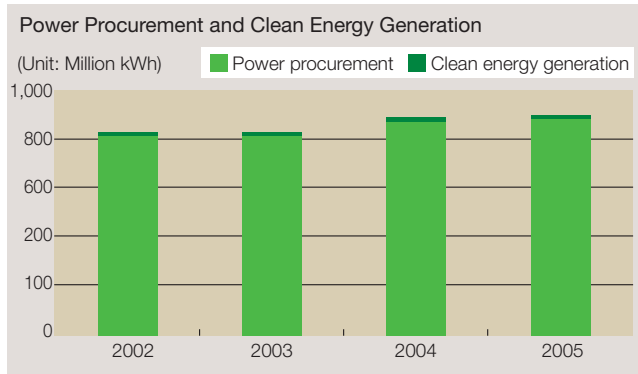
Power Procurement and Clean Energy Generation

(Unit: Million kWh) ■ Power procurement ■ Clean energy generation

	2002	2003	2004	2005

Figures up to fiscal 2003 are for NTT Communications Corporation only. From fiscal 2004 onward, figures account for the total volume of the NTT Communications Group.
In fiscal 2005, power procurement and clean energy generation of the NTT Communications Group amounted to 880 million kWh and 17 million kWh, respectively.

CO_2 Emissions Produced by Business Operations

(Unit: Thousand Tons-CO_2) ■ Power used ■ Fuel for company vehicles, oil and gas used in business operations

	2002	2003	2004	2005	2005 (New emission index)

Figures up to fiscal 2003 are for NTT Communications Corporation only. From fiscal 2004 onward, figures account for the total volume of the NTT Communications Group.
In fiscal 2005, the volume of CO_2 emissions produced by the business operations of the NTT Communications Group amounted to a total of 349,000t-CO_2, including emissions of 332,000t-CO_2 due to power use and 17,000t-CO_2 from the use of company vehicles, and oil and gas used in business operations.

Expanding Measures to Prevent Global Warming: "Cool Biz" and "2 Up, 3 Down"

Following on from efforts carried out in the previous year, NTT Communications conducted a series of measures aimed at preventing global warming as part of wider national projects. Such measures included:

- Office air-conditioning systems were set to 28ºC over the summer and employees were encouraged to compensate by dressing lightly ("Cool Biz" campaign).
- We participated in the activities of "Team Minus 6%," a national project in which participating companies pledge to reduce their greenhouse gas output by 6%.
- We promoted the "2 Up, 3 Down" rule: Employees were encouraged to walk up two flights of stairs and down three rather than take the elevator.
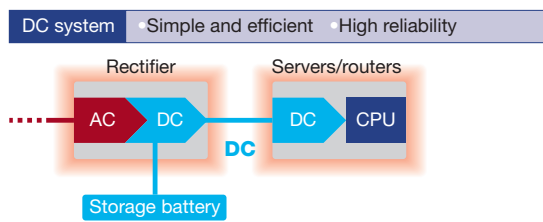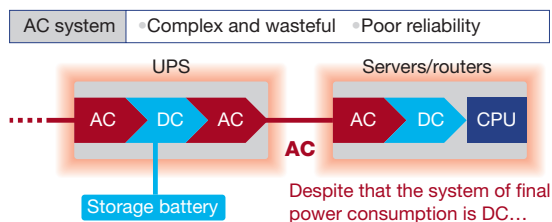- We reduced the number of operating elevators at set time periods throughout the day.

At NTT Communications Hibiya Building, the "Cool Biz" campaign promoted from July to September 2005 resulted in a 124t reduction in CO_2 emissions. This is equivalent to the annual CO_2 absorption level of approximately 8,850 cedar trees. Additionally, customers visiting NTT Communications premises were informed of our guidelines on lighter clothing by means of posters and brochures.

Furthermore, employees are actively encouraged to pursue measures at home to help stem global warming.

DC Communications Equipment Supporting the Efficient Use of Power

The core CPU in computers operates on a direct current (DC) power supply. In conventional systems, a complex method is commonly used: alternating current power (AC), which is provided by the power supplier, is converted by UPS to direct current power (DC), and reverted to AC before being sent to servers and routers. NTT Communications is working to promote a DC power supply system that causes less converting loss. In the course of this effort, we are proposing our housing service clients to adopt DC equipment as a way to reduce total costs resulting from less power consumption.

AC system	•Complex and wasteful	•Poor reliability

UPS: AC → DC → AC
Storage battery
Servers/routers: AC → DC → CPU
AC
Despite that the system of final power consumption is DC…

DC system	•Simple and efficient	•High reliability

Rectifier: AC → DC
Storage battery
Servers/routers: DC → CPU
DC

Waste Reduction and Appropriate Management of Chemicals

Pursuing thorough management of polychlorinated-biphenyl (PCB) storage and processing and increasing recycling and reuse rates associated with the update of communications equipment

Promotion of Waste Reduction and Recycling

Recycling Rate for Dismantled Communications Equipment a Steady 98%

In order to continuously provide the latest services of our telecommunications business in a stable manner, equipment must be appropriately updated and integrated. When communications equipment becomes obsolete, recycling is the first option. However, should this prove unfeasible, we accurately take account of quantity of equipment before processing it in the best way possible.

Throughout fiscal 2005, we continued efforts to reuse obsolete equipment in-house, and this resulted in the reuse of 576 items. As a result, we were able to maintain the related recycling rate at a level roughly on par with the previous year despite a decline in the total waste volume.

$$\text{*Recycling rate} = \frac{\text{Valuable weight} + \text{recycled weight}}{\text{Total waste volume}}$$

Waste Volumes and Recycling Rates for Dismantled Communications Equipment (Unit: t)

Fiscal year	Total waste volume	Valuable weight	Recycled weight	Final disposal volume	Recycling rate
2005	3,501	2,721	733	50	98.7%
2004	4,702	1,428	3,215	59	98.7%
2003	2,847	1,585	1,171	90	96.8%
2002	2,883	1,895	777	211	92.7%

Improving the Recycling Rate of Construction Waste

As part of efforts to provide customers with services based on the latest communications technology, NTT Communications frequently upgrades or tears down facilities. In fiscal 2005, the recycling rate for designated materials declined to 93.6%, while for other materials (except for sludge), the recycling rate was 71.2%. In fiscal 2006, we

will continuously undertake measures to improve recycling rates through realizing our target of "zero disposal" of waste at final disposal facilities and promoting consignment of recycling to contractors with high recycling rates.

Construction Waste Volume and Recycling Rate (Unit: t)

Fiscal year	Total waste volume	Direct reuse volume		Intermediate treatment volume	Final disposal volume	Recycling rate
		On-site	Off-site			
2005	1,862	0	212	1,626	354	81.0%
2004	668	0	94	573	163	75.7%
2003	3,627	0	139	3,327	391	89.2%
2002	10,256	7,691	221	461	611	94.0%

Promoting a Shift from High Quality Paper to Recycled Paper

NTT Communications is making sustained efforts to reduce the volume of paper used in the course of administration and in the brochures and flyers we distribute to customers. At the same time, we are aiming to conserve virgin pulp through promoting a shift from using high quality paper to recycled paper.

The promotion in fiscal 2005 for further switching to recycled paper

resulted in the percentage of virgin pulp used roughly on par with the previous year, although the total volume of paper consumption increased.

Looking to the future, we plan to further promote a shift to using 100% recycled paper and make efforts to significantly reduce the use of virgin pulp.

Paper Consumption for Administrative Use

Fiscal year	Item	High quality paper	100% recycled paper	70% recycled paper	Total
2005	Total number of sheets (A4 equivalent)	5,011,000	42,933,820	95,719,640	143,664,460
	Total volume (kg equivalent)	20,044	171,735	382,879	574,658
	Share of total volume by type of paper (%)	3.5%	29.9%	66.6%	100%
2005	Virgin pulp volume (kg)	20,044	0	114,864	134,908 (Share of total volume: 23.5%)
2004		22,712	0	79,153	101,866 (Share of total volume: 21.4%)
2003		7,288	0	68,364	75,652 (Share of total volume: 13.2%)
2002		5,525	0	77,771	83,296 (Share of total volume: 20.6%)

Improvement in the Recycling Rate of Office Waste

Under its Medium- and Long-Term Plan, NTT Communications is aiming to achieve an office waste-recycling rate of 70%, and working to ensure that such waste is processed, managed, and collected and sorted appropriately in accordance with the relevant legislation.

Accordingly, we were able to improve the recycling rate in fiscal 2005 as a result of the thorough sorting process.

Volume of Office Waste and Recycling Rate   (Unit: t)

Fiscal year	Total waste volume	Recycled weight	Volume discarded	Final disposal volume	Recycling rate
2005	4,134	2,128	2,004	941	51.5%
2004	6,553	3,152	3,401	626	48.1%
2003	6,101	2,659	3,435	637	43.6%
2002	4,373	1,650	2,715	1,974	19.0%

*The figures for fiscal 2002 do not include the volume amounts for OA equipment, fixtures and furniture, and other office-related materials.

Appropriate Management of Chemicals

Strengthening PCB Storage Control through Establishing Relevant Guidelines

NTT Communications established guidelines for managing harmful PCBs, a family of highly toxic chemical compounds, under a central policy that upholds quick action in regard to processing PCBs into a non-hazardous form and calls for strict assessment and management should the continuous use of equipment containing or generating PCBs remain necessary.

In fiscal 2005, in order to assess the quantity of processed PCBs, NTT Communications carried out an original and extensive equipment-weight survey in addition to its regular PCB surveys.

Volume of PCBs Stored

Fiscal year	Transformers (units)		High-voltage capacitors (units)		Low-voltage capacitors (units)		Ballasts (units)		Non-carbon paper (kg)	
	Volume stored	Volume used	Volume stored	Volume used	Volume stored	Volume used	Volume stored	Volume used	Volume stored	Volume used
2005	0	2	0	0	22	38	5,097	0	0	0
2004	0	2	0	0	22	38	5,091	4	0	0
2003	0	2	0	0	6	54	140	4,955	0	0
2002	0	2	0	0	6	54	140	4,955	0	0

Promoting the Total Elimination of Asbestos

NTT Communications is conducting surveys regarding the use and status of asbestos at the building facilities (355 locations) that it owns or uses. Eight facilities for which sprayed asbestos was used are confirmed to have no problems of scattering, with less than standard value (0-0.81f/L: allowable maximum: 10f/L) at all of these facilities. In addition, at five of these eight facilities, elimination work is proceeding (partially completed), while with the remaining three facilities, we are assessing whether it is possible to eliminate the substance together with promoting as early elimination as possible. We are also investigating possible use and status of spraying material containing asbestos at our facilities.

COLUMN

Complying with Laws and Regulations

We, the NTT Communications Group, are cooperating with respective NTT Group companies under initiatives taken by working groups established to address various individual issues, and working solidly to keep employees informed of various laws and regulations such as environmental laws, emissions standards, and the Pollutant Release and Transfer Register (PRTR)*. Also, we have autonomously established internal guidelines to comply with various laws and regulations. In fiscal 2005, the NTT Communications Group fully adhered to all relevant rules and regulations and, as a result, recorded no environment-related accident, violation, penalty, or complaint.

* Pollutant Release and Transfer Register (PRTR): Regulation formulated to promote assessment and management improvements in regard to designated chemical substances and their impact on the environment

Environmental Business and Management

Making steady improvements via the introduction of environmental protection activities in business operations, including the development of ICT solutions that contribute to reduced environmental load

Environmental Business

GTC-ECO® One-Stop ASP Enables Efficient Searching and Assessment of Chemical Substance Information

High Utility Value for Small- and Medium-Sized Supply Chains

GTC-ECO® is an application service provider (ASP) that provides environmental data on materials used in a wide variety of parts and other items and supports green procurement of parts and other materials.

GTC-ECO® is based on two core services: chemical information support, which searches and assesses environmental data on materials used in a wide variety of parts; and analytical support, which conducts analysis on behalf of clients on hazardous chemicals included in various parts and equipment and whose use is subject to the Restriction of Hazardous Substances (RoHS) Directive.* Additionally, we provide preparation and input services of green procurement survey response sheets and material composition sheets.

GTC-ECO® is a one-stop service that taps the combined expertise of professionals from NTT Communications, Japan Chemical Database Ltd., and Sumika Chemical Analysis Service, Ltd. This service enhances usability value not only for large-scale assembled parts manufacturers but also for the many supporting supply chains.

* RoHS Directive: An EU directive restricting the use of certain hazardous substances in electrical and electronic equipment. The objective of the RoHS Directive is to minimize the impact on human health and the environment throughout the product lifecycle from production to disposal.

Supporting the Establishment of Japan as "Environmental Quality Nation"

Under GTC-ECO®, all processes involved in green procurement are handled online. Since GTC-ECO® is a service based on the ASP model, customers do not need to build their own in-house system but can still produce their own highly reliable green procurement survey response sheets at a significantly reduced cost.

At NTT Communications, we consider that Japanese companies should not be merely concerned with production processes but also aim to raise environmental quality across all supply chains and life cycles to create an advanced technology-oriented society proud of its sustainable environment. We have labeled this concept "environmental quality nation" and position GTC-ECO® as a significant service that will support the establishment of such an environment. We also work continuously to improve the content of GTC-ECO®.

Outside Seminars

At NTT Communications, in addition to making efforts to raise environmental awareness within the Group, we also organize an environmental seminar for people outside the Company as a means of widely disclosing our efforts and approach toward the environment. In the environmental seminar held in June 2006, lectures were given by an official from the Ministry of Economy, Trade and Industry's Industrial Science and Technology Policy and Environment Bureau as well as an NTT Communications staff member. In these lectures, the latest examples of managing hazardous chemical substances were introduced and expert know-how disclosed.

COLUMN

Environmental Protection Activity Website (http://www.ntt.com/eco/) (Japanese only)

In addition to this CSR Report, NTT Communications has established an environmental protection activity website in which we provide more detailed information on how ICT solutions help reduce the environmental burden caused by society as well as our efforts, along with messages and comments from our staff and from outside parties.

Major Contents

Environmental education
http://www.ntt.com/eco/0601.html

PC recycling
http://www.ntt.com/eco/0603.html

Waste processing monitoring system utilizing GPS
http://www.ntt.com/eco/0602.html

Ecology through ICT solutions
http://www.ntt.com/eco/0604.html

Environmental Management

Enhancing Green Purchase Guidelines and Conducting Briefing Session

In January 2006, NTT Communications revised its green purchase guidelines formulated in 1999 to further boost their effectiveness. The adjusted guidelines, which came into effect as of March 2006, include a new evaluation standard for assessing suppliers' awareness and contribution to environmental protection activities. It is hoped the addition of this standard will assist in reducing the overall impact of our activities on the environment through improvements to our supply chain.

Prior to putting the new guidelines into practice, we held a related briefing session for new and existing suppliers. We also encourage suppliers to submit a written pledge to adhere to the new standard and will carry out annual evaluations to ensure the revised conditions are being met.

## Strengthening the Environmental Management Structure

We are pursuing the acquisition of ISO 14001 certification in order to further enhance NTT Communications' environmental management.

Following the acquisition of ISO 14001, the international standard for environmental management, in October 1999 by the Materials Office Planning Department in the Network Business Division, which is the predecessor of the current Procurement Office, the office implemented and commenced operation of a comprehensive environmental management system in April 2005 based on the revised ISO 14001:2004. Under this sweeping new arrangement, the office oversees all procurement processes including Company-wide purchase and business consignment. The office also regularly revises its guidelines and oversees a wide range of environmental protection activities from reducing paper and power consumption to recycling wastes.

Meanwhile, the environmental management activities of the Business Development System Engineering Department (previously Solutions Division IT Business Promotion Department), which is in charge of planning and building telecommunications systems including software development, underwent inspection by an outside examiner of its environmental management system based on ISO 14001:1996 and subsequently acquired ISO 14001 certification in March 2004.

In line with the new ISO 14001: 2004 standard that came into effect in November 2004, we updated our environmental management manual and implemented the policies and procedures indicated therein in April 2004. In March 2006, during a regular examination, the operations based on this manual officially acquired the new certification.

After NTT World Engineering Marine Corporation was awarded ISO certification in June 2001 and NTTPC Communications Inc. in November 2003, we inaugurated working groups to promote efforts to acquire ISO 14001 status. As of March 2006, nine departments in three Group companies had gained the certification.
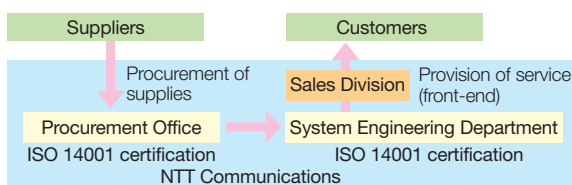
Environmental Accounting

In fiscal 2005, the total cost of environmental preservation activities amounted to a total of ¥1,433 million, consisting of approximately ¥911 million in environmental investments and ¥522 million in environmental expenses. This figure represented a dramatic ¥304 million increase over the previous year and was mainly due to magnified investments related to global warming prevention.

At the same time, the economic effects of our environmental preservation measures in fiscal 2005 were significant, amounting to ¥2,394 million. In addition to a hefty increase in revenue through sales of cables, among others, NTT Communications was able to reduce costs by utilizing WebBilling, an online billing function, and the continuous reuse of equipment.

Environmental Preservation Costs (by type of operation) (Millions of yen)

Category		Details of key measures	Investment		Expenses	
			2004	2005	2004	2005
(1) Business area costs			299.6	911.8	793.7	440.7
Breakdown	(1)-1 Pollution prevention costs	•Storage and treatment of PCBs	-	91.0	26.9	44.8
	(1)-2 Global environmental protection costs	•Improvement and upgrading of air-conditioning equipment •Upgrading of inefficient equipment	299.6	820.7	104.2	89.2
	(1)-3 Resource circulation costs	•Switch to recycled photocopy paper •Recycling of communications equipment and used optical cable •Recycling of construction waste	-	-	662.6	306.6
(2) Upstream/Downstream costs			-	-	8.1	21.1
(3) Administration costs			-	-	28.0	12.8
(4) R&D costs			-	-	-	47.2
(5) Social activities costs			-	-	-	-
(6) Environmental remediation costs			-	-	-	-
Total			299.6	911.8	829.8	522.0

Economic Effects of Environmental-Preservation Measures (Practical Effects) (Millions of yen)

	Details of effects	FY2004	FY2005
Revenues	Revenues from sales (cable, metal, etc.)	43	165
Cost reductions	Reduction in power charge due to measures taken	46	47
	Reductions in cost of new purchases due to reuse of existing equipment	2,619	1,941
	Reductions in mailing and paper costs due to WebBilling	137	239
	Other (green procurement, etc.)	11	0
Total		2,856	2,394

* Tabulation period: Data for fiscal 2005 refers to the period from April 1, 2005 to March 31, 2006
* Scope: NTT Communications Corporation (environmental accounting data from Group companies is not included)
* Tabulation and disclosure methods: Amounts were tabulated according to the Ministry of the Environment's Environmental Accounting Guidelines 2005. Investments and expenses were tabulated separately under environmental preservation costs. Expenses include personnel and labor costs, but do not include depreciation.

COLUMN

NTT Communications Earns the Second Place Award in the Communication Services in Nikkei Environmental Management Survey

NTT Communications was awarded second place in the communications services category in Nikkei Environmental Management Survey* conducted by Nihon Keizai Shimbun, Inc., which publishes the leading business daily *The Nihon Keizai Shimbun*. The result was announced in the newspaper on December 2, 2005, and marked a leap from the previous year's eighth place. The survey, which was launched in 1997, ranks a total of 4,000 major listed and unlisted domestic companies according to evaluation based on seven key criteria: operational systems, long-term targets, anti-pollution measures, resource recycling, product measures, measures against global warming, and office measures. The report praised NTT Communications for its unceasing and diligent efforts to tackle environmental issues; publication of specific long-term objectives; disclosure of environmental data, including Group company data; and range of environment-friendly services, including GTC-ECO®, cocoa and CAVA.
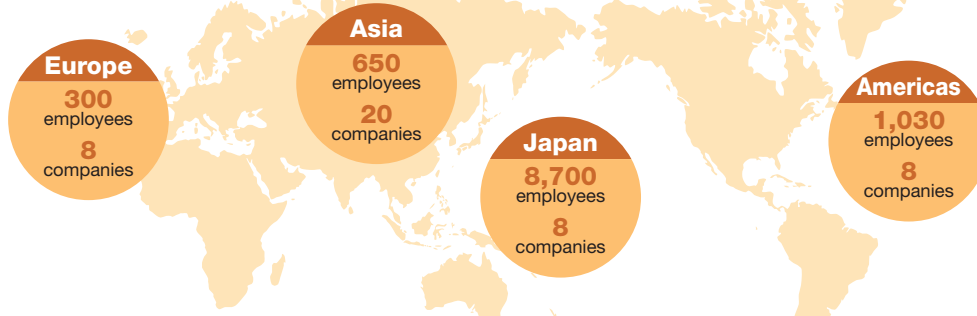
* Environmental Management Survey: A survey by Nihon Keizai Shimbun, Inc. that evaluates the performance of enterprises in tackling environmental issues in the course of for-profit operations. This year's survey is the ninth since its initial launch in 1997.

Respecting Diversity

We will respect the diversity of each and every employee and create a workplace environment that is conducive to personal development. At the same time, we will fulfill our social responsibility through corporate activities by upholding high ethical standards with our partners as an information and communications professional.

Respecting Individuality and Diversity

Global communications are supported by **10,680** employees in 44 companies in respective areas around the world.

Europe
300 employees
8 companies

Asia
650 employees
20 companies

Japan
8,700 employees
8 companies

Americas
1,030 employees
8 companies

NTT Communications Corporation and its 43 subsidiaries (as of June 2006)

Equal Opportunities for Women

In 2002, NTT Communications launched the NTT Communications Women's Training and Advancement Plan with the aim of promoting a range of activities based on specific strategies and targets related to the employment, training, and advancement of women.

Our commitment to gender equality in the private sector has been recognized as a result of promoting measures based on this plan. In June 2004, NTT Communications was awarded "The Minister's Award of Excellence" by the Ministry of Health, Labour and Welfare, stating "NTT Communications' efforts to assist women in developing their professional skills are an example for others to follow, and their results are clearly recognized."

Furthermore, in July 2003, the government officially announced the Law to Promote Measures for the Support of Next-Generation Training

Initiatives. Based on the provision of this law, the Company devised an action plan to support a suitable balance between work and home life.

In terms of career advancement, NTT Communications has appointed 128 female employees to management positions above the assistant manager level since 2002. The percentage of women in management as of the end of March 2006 was 3.0%.

Breakdown of Number of Employees and Newly Recruited Employees by Gender (NTT Communications Corporation)

Number of employees	7,650 persons (Male: 90.4%; Female: 9.6%) (As of March 2006)
Newly recruited employees	225 persons (Male: 70.7%; Female: 29.3%) (New employees who joined the Company in fiscal 2006)

Supporting a Work-Life Balance

As indicated in the table on the right, NTT Communications has instituted a strong system of support for employees' childcare and eldercare duties, thereby empowering its people to strike a balance between the demands of work and home. In order to foster a workplace where employees feel encouraged to use these systems, the NTT Group has developed a website on its childcare/eldercare support programs. By accessing this site, employees can become familiar with the details of these programs as well as childcare, eldercare, and other social-service programs available from the public and private sectors. Consequently, it is being praised as a valued tool that facilitates smooth reinstatement of employees returning from leave. In this way, we are actively supporting the nurturing of children for the next generation, and in turn, addressing the need to resolve social issues concerning the declining birthrate.

Overview of Support System and Number of Employees Who Utilized the System in Fiscal 2005 (NTT Communications Corporation)

Type of system	Overview	Number of employees who utilized the system (FY2005)
Maternity leave	6 weeks before birth and 8 weeks after birth.	53 persons
Childcare leave	Taking leave for up to 3 years from the date of a child's birth	80 persons (including 1 male employee)
Special working system for childcare (Reduced work hours)	Reduced work hours for childcare until a child reaches the age of 7 (up until the first year-end of elementary school) (4-6 hours)	60 persons (including 1 male employee)
Eldercare leave	For the care of elderly family members, employees may take up to 93 days as designated by law, plus 15 months in accordance with company rules, for eldercare leave.	5 persons (including 2 male employees)
Reduced work hours for eldercare	For the care of elderly family members, employees may take up to 93 days as designated by law, plus 33 months in accordance with company rules (4-6 hours).	None

Employee Comments

"A bold decision to use the support system enabled me to strike a balance between my work and home life."

Tsuguo Komiya
Network Business Division

I have always wanted to raise a child together with my wife even before I got married. When my child was actually born, I strongly felt that there would never be a better time to be with my child. I discussed matters with my wife, who is also working, and we decided to alternately take childcare leave.

Specifically, after my wife returned to work following her childcare leave, from October 2004 I took leave for eight months when my child was 20 months old. Afterwards, I continued using the special working system for childcare, whereby I reduced my work hours to five hours and worked from 10 am to 4 pm until my child reached the age of three and a half years old. This made it possible for me to take my child to and from nursery school.

Raising a child has been much harder than I had imagined; however, such an opportunity provided by childcare leave enabled me to share the same burden, problems, and pleasure of raising a child with my wife, as well as gain an even greater sense of each other's thoughts and feelings. It was a great experience that nothing else can take the place of.

I appreciate my boss and colleagues for giving me their understanding and support in using this system.

Employment Opportunities for Persons with Disabilities

NTT Communications has long been at the forefront of providing employment opportunities for persons with disabilities and diligently pursuing hiring targets mandated by Japanese law. Since the Company was founded, we have constantly expanded the number of persons with disabilities employed, as reflected by achieving continuous increases of 1.33%, 1.34%, and 1.41% in the employment rate of persons with disabilities in fiscal 2004, fiscal 2005 and as of June 2006, respectively. We will continue to undertake active measures to achieve the statutory employment rate.

Human Resources Development System

Establishment of the New Human Resources Development Policy "New HRM"

As a company with network services as its core business, NTT Communications is constantly aiming to improve personnel and training systems, with respective departments working to achieve better communications and deeper emotional ties, thereby enabling each and every employee to bring out his or her individuality. To realize this objective, we have reviewed our Human Resource Management (HRM) and launched the "New HRM" policy in April 2006 accompanied by the keywords "Gemba skills and teamwork."

"New HRM" Human Resources Development Policy

Redefinition of Ideal Image of Personnel

Focusing on "Gemba skills" and "teamwork," we have redefined our ideal image of personnel as being an "on-site professional who takes pride in supporting customers backed by experience, practical technological capability, and skill," and "personnel who can proactively make decisions and act as a team member along with maximizing added-value through team play."

Review of Recruitment Policy

As a replacement to the conventional approach to recruitment employed in each area of business, a new system will be launched to collectively hire personnel on a Company-wide basis, in which the Company seeks diverse personnel who can expand their own field of specialty and who can act proactively from Company-wide perspectives.

Review of Personnel Assignment and Development Policy

Based on the concept of "professional growth through practices," we have eliminated the system in which an employee is assigned to a certain position over the long term, and instead, are aiming to expand his or her perspective of business operations through the cross-sectional and Company-wide transfer of personnel as a general rule. We will in turn promote appointment to a management position following accumulated work experience in respective value chains.

Review of Goal Setting and Personnel Evaluation System

Based on a simple and easy-to-understand framework, we aim to realize goal setting and overall optimal goal orientation (teamwork) from the bottom up by reflecting voices from the workplace and improving day-to-day communication between managers and subordinates.

Internal Job Posting System

At NTT Communications, we have implemented an internal job posting system since 2001 in order to provide employees with opportunities to work in a desired position and become actively engaged in the promotion of business. Internal job postings within NTT Communications and the NTT Group are implemented approximately three times a year. Since this system maintains the confidentiality of employee applications and the position to which they wish to be assigned, it is widely used mainly by young people as a personnel scheme that aims to place the right people in the right jobs. This in turn enables employees to bring out their capabilities to the fullest in their professional areas of strength or in career areas in which they want to gain experience. Additionally, it is presumed to be an effective way of energizing the organization to establish an inviting workplace that attracts employees.

In fiscal 2005, the number of transferred employees using this system within NTT Communications and the NTT Group was 94 and 103 persons, respectively .

Employee Transfers

Fiscal Year	2001		2002		2003*		2004		2005	
	Number of applications	Transfers	Number of applications	Transfers	Number of applications	Transfers	Number of applications	Transfers	Number of applications	Transfers
NTT Communications	361	120	243	73	141	69	176	88	173	94
NTT Group					-	76	-	92	-	103

* Job postings within the NTT Group were initiated from fiscal 2003.

Training System

We are seeking to enhance employee skills through providing a wide variety of training programs tailored to personnel development, including training for new employees and junior staff as well as general training and management training. We view training as a supplement of "on-site practices," whereby training based on the Career Development Plan (CDP) of each employee is determined upon consulting with his or her supervisor. To ensure a conducive environment in which training can be successfully completed, respective employees and supervisors both take responsibility for doing so.

Furthermore, rotational training for new employees is being implemented to enable them to gain experience in related departments that mainly involve contact with customers. This in turn allows them to gain experience in different cross-related operations and ultimately contributes to strengthening on-site capabilities and people skills. In this way, we are undertaking efforts to nurture employees capable of considering internal operations from a broad perspective.

Cumulative number of employees who participated in training [January – December 2005] (NTT Communications Corporation)

Trainings at Azabu Seminar House*	Trainings at external facilities	Schooling
5,271 persons	2,930 persons	1,721 persons

* NTT Communications' training facility

Participation of Top Management in Training Activities

NTT Communications actively organizes opportunities to enable senior management executives to participate in training and directly discuss management issues with trainees. For example, in February and March 2006, dialogue meetings where management responds to employees' questions were conducted for members of top management and employees who joined the Company from fiscal 2000 to fiscal 2002 and had little daily contact with the management.

Since employees were highly interested in the opportunity of sharing the Company's management issues and directly exchanging opinions with senior executives, we will actively promote the participation of top management in the future.

Number of Dialogue Meetings Held in FY2005: 3/ Number of employee participants: 237 persons

Reference	(NTT Communications Corporation)
February 27, 2006	97 persons (mainly employees who joined the Company in FY2001)
February 28, 2006	99 persons (mainly employees who joined the Company in FY2002)
March 2, 2006	41 persons (mainly employees who joined the Company in FY2000)

Creating a Work Environment and Sense of Ethics that Enables Personal Fulfillment

Creating a Great Place to Work

Work-Life Committee

In 2003, NTT Communications established the Work-Life Committee comprised of representative members of the Company and labor unions, with the aim of developing a satisfying workplace and improving the balance of work and home life for all employees. Since then, various initiatives have been taken directed toward reducing total work hours.

In fiscal 2005, we implemented various measures to improve employee's work-life balance such as establishing standard days of leaving work on time throughout the Company and issuing messages from top management related to work-life balance at regular intervals.

Additionally, as a result of considering a reduction in total work hours at each and every employee level, operations have become more efficient through such means as shorter meetings and simplifying internal documents and materials. Total overtime work in fiscal 2005 was considerably reduced by 14% compared with fiscal 2003, resulting in significant progress being made toward reducing total work hours.

Average total overtime work in FY2005 (per employee) :	299 hours

(NTT Communications Corporation)

Occupational Safety and Health

At NTT Communications, workers' safety is a top priority. Placing a solid emphasis on prevention, concerted efforts include reviewing operating environments and operation manuals and raising awareness of safety issues through case studies, as well as conducting frequent safety inspections.

Additionally, in cases where an accident occurs, we are organizing a system to immediately share information, quickly contact customers as necessary, and notify and warn all employees. The aim of these measures is to prevent the reoccurrence of accidents and ensure work safety.

In fiscal 2005, there were a total of four work-related accidents (occupational accidents and commuting accidents) that occurred at NTT Communications.

Acquired Certification for Comfortable Workplace Promotion Plan

NTT World Engineering Marine Corporation (WE Marine) is actively promoting activities to improve safety and develop a comfortable workplace without any work-related accidents in tandem with Japan's Occupational Health and Safety Law and other regulations.

In December 2005, efforts undertaken by WE Marine were recognized, and its main offices in Yokohama and Nagasaki were certified as offices that are carrying out comfortable workplace promotion plans in accordance with a program promoted and accredited by the Ministry of Health, Labour and Welfare (prefectural Labor Bureau). Specifically, measures were formulated and the period of implementation was clearly defined for realizing a comfortable workplace in areas that included the work environment (thermal conditions, work space, etc.), work methods (work involving bad posture and heavy lifting, etc.), facilities to support recovery from work fatigue (resting rooms, environmental improvements such as green spaces, etc.), and facilities to support daily life in the workplace (eating areas, changing rooms, etc.).

We will continue to actively promote improvement measures geared toward creating a comfortable work environment.

■Comfortable Workplace Promotion Plan Certificate

Employees Benefits/Cafeteria Plan

From the time an employee joins NTT Communications to the time of retirement, we provide various kinds of employee benefits that can be equally used by all employees. For example, in addition to cafeteria plans that enable employees to freely choose from various menu options according to their lifestyle, we also support employees in managing their life through training and counseling. In fiscal 2005, the percentage of NTT Communication employees using our cafeteria plans was 99%. Additionally, we offer various health management programs and support systems, including carrying out mental health training and establishing counseling desks internally and externally so that employees can work with a sense of assurance and peace of mind.

Support of Volunteer Activities

Volunteer Gift Program

NTT Communications is executing a Volunteer Gift Program, which involves donating goods to volunteer activities in which employees are participating. In addition to encouraging employee volunteerism, this program is also conducted for the purpose of supporting NPOs through employees' activities.

Fiscal 2005 marks the seventh time since the program was instituted. During the term, NTT Communications contributed to seven organizations, including the donation of computers to Fujimino International Culture Exchange Center, which provides life support and computer classes for foreign residents in Japan, plus the donation of original uniforms to the *Hikobae Local Theatre Education Group*, a

■Donation of personal computers

■Donation of original uniforms

group comprised of elementary, junior high, and senior high school students who give performances at eldercare and other facilities.

Leave System

We are introducing various leave systems to support employees' personal fulfillment through taking part in volunteer activities. The status of use of these systems in fiscal 2005 is indicated in the table on the right.

Leave Systems and Number of Employees Who Used the Systems in FY2005
(NTT Communications Corporation)

Volunteer leave	41 persons
Japan Overseas Cooperation Volunteer program leave	None
Disaster volunteer leave	None

Ethics and Respecting Human Rights

Comprehensive Education to Raise Human Rights Awareness

As a globally expanding company, NTT Communications considers the resolution of human rights issues, beginning with anti-discrimination, to be vitally important for creating an enriched culture that respects human rights. Accordingly, with the aim of establishing a business structure that prohibits any type of discrimination, we are striving to resolve these issues through our daily business activities.

As a means of "creating a bright and vibrant workplace," various measures are being carried out in our daily business operations with the awareness that all employees and partner employees, including temporary staff, are equal. At the same time, we recognize individuality and diversity together with advocating mutual trust and respect.

Human Rights Enlightenment Training Held

NTT Communications requires all NTT Communications employees and partner employees to participate in human rights enlightenment training at least once a year. Approximately 15,000 persons participated in fiscal 2005 in this training, which is aimed at preventing problems related to human rights in the workplace from the perspectives of gaining a basic knowledge of human rights issues such as anti-discrimination, thorough measures for not allowing discrimination personally or by others, and management's stance on improving the workplace environment.

Furthermore, approximately 250 persons participate annually in sexual harassment- and power harassment-related training conducted by an outside lecturer. In addition to these training programs, we are enhancing human rights awareness by sending out a monthly e-mail magazine to all employees and partner employees and introducing examples of harassment that are likely to occur in the workplace.

We are also holding annual training for senior executives to study anti-discrimination and other human rights issues.

Soliciting Human Rights and Compliance Slogans

We solicit slogans every year for the purpose of developing opportunities to recognize human rights issues and further increase human rights awareness. In fiscal 2005, we concurrently requested slogans related to human rights as well as compliance, in which more than 10,000 slogans were submitted.

In addition to giving awards to employees who applied his or her slogans during Human Rights Week, we also make block calendars and memo pads printed with these slogans and distribute them to all worksites. In this way, we are providing opportunities to think about human rights at all times.

Experiential Learning (Simulated Experience of Being Visually Impaired, Wheelchair Bound and Elderly)

NTT Communications implements a program on an annual basis to deepen understanding for persons with disabilities and the elderly by wearing an eye mask, moving around in a wheelchair, and experiencing conditions associated with old age. This program was held on December 21 in fiscal 2005, in which 19 persons experienced visual impairment by wearing an eye mask and attended a lecture by a guide dog user, along with 14 persons experiencing what it's like to be wheelchair bound and aging.

Many comments were received from participants connected to respecting basic human rights. These included: "I experienced a condition that I have never realized before and now understand a little about how people with visual impairments feel;" "The way I perceive persons with disabilities has changed by actually moving around in a wheelchair in addition to experiencing the movements of elderly people;" "I realized that steps, which I normally don't take any notice of, are actually a major impediment;" and "I would like to take the initiative to support people with disabilities from now on."

■Simulated experience of being elderly

■Simulated experience of being visually impaired

Employee Comments

"Gaining Valuable Experience through New Discoveries"

Yuji Mori
Corporate Planning Department

I participated in the experiential learning program to experience walking wearing an eye mask. Participants separated into groups of two and went for a walk in a public street. One person wears an eye mask and holds a walking stick in one hand and his or her partner's arm with the other hand.

As I walked in the city, all senses except for my sense of sight became extremely sensitive toward comprehending the surrounding conditions.

I was frightened of the whizzing sound and cool brush of the air as people or bicycles passed by, while I felt warm air on the side where my partner stood. I felt secure by the warmth of my partner's body temperature.

It was a valuable experience in the sense that it made me realize that volunteers who help visually impaired persons take walks and guide dogs are not only physically supporting persons with disabilities but also providing mental support.

Third Party Opinion

On Reading the NTT Communications Group
Corporate Social Responsibility Report 2006

The NTT Communications Group is taking a very proactive approach in implementing its basic CSR policy, undertaking activities in the areas of contributing to society, global environmental protection, and respecting employees.

In contributing to society, NTT Communications takes active steps towards a safer, more secure society as befits a company that is responsible for safeguarding social infrastructure. In the field of global environmental protection, the Group amply demonstrates its understanding of power-intensive business systems and has worked successfully to achieve its CO_2 emission reduction targets. As a global player, NTT Communications affirms its respect for employees by taking the initiative in promoting diversity. These efforts fully justify a high evaluation. NTT Communications and its Group companies are attaching the highest importance to implementing CSR activities, and the results of these initiatives are expected to resonate widely throughout society.

The Company has undertaken its environmental protection activities based on specific targets, and looking to the future, it will no doubt be necessary to set targets and implement the PDCA cycle in relation to the Company's societal contributions and respect for employees as well. This issue is common to nearly all Japanese companies, and it is an important point in pursuing thorough CSR initiatives.

In setting the direction of its CSR efforts, NTT Communications must seek out the opinions of diverse stakeholders both within and outside the Company. Since NTT Communications is responsible for maintaining social infrastructure, its CSR activities are directly linked to the public interest, and therefore, the Group has a duty to seek out a wide range of opinions, and to establish a framework for reflecting this in formulating and carrying out its CSR plan. One suggestion would be to start with a stakeholder dialogue on the CSR Report.

Judging from the Company's environmental accounting, its efforts towards environmental protection are achieving significant economic effects. The next step would be, by making use of such information, to develop overall indices for environmental and CSR management, which will make the Group's activities even clearer. In doing so, devising several Key Performance Indicators (KPI) would increase the scope for CSR management while increasing transparency. Therefore, I would suggest making the next step by identifying important (key) activities for CSR and setting the direction, with qualitative indices also taken into account.

Finally, NTT Communications is working hard to implement CSR activities proactively throughout the whole Group. However, specific plans and the activities of the main Group companies have yet to be fully disclosed. NTT Communications has business sites scattered around the world. Promoting CSR activities in each region and location and disclosing the relevant information would further reinforce the Group's CSR management.

Communication is the very basis of CSR. I fully expect that the NTT Communications Group, a group whose business is communication, will also become a frontrunner in CSR management.

Professor Katsuhiko Kokubu
Graduate School of
BusinessAdministration,
Kobe University

He assumed his current post in 2001, following an associate professorship at Osaka City University and Kobe University.

His major is environmental management, environmental accounting, and CSR.

He has held positions including:
- Chairman of Research into Promoting the Development of Environmental Business / Environmental Accounting Promotion Committee funded by the Ministry of Economy, Trade and Industry
- Member of Setting Environmental Accounting Guidelines Committee by the Ministry of Environment
- Expert member of the United Nations Division for Sustainable Development Expert Working Group on Environmental Management

In 2003, he founded the Institute for Environmental Management Accounting and now serves as a director.

His major publications include *An Introduction to Environmental Management Accounting* and *Material Flow Cost Accounting*.

Response to Third Party Opinion

As described in this report, the NTT Communications Group's CSR activities are still in the establishment stage. We established a Basic CSR Policy in June 2006, and are working to share this basic policy widely among all Group employees. In the future, we will deepen the Group's CSR activities, including implementing CSR workshops for all Group employees and proactively exchanging opinions and information with as many stakeholders as possible at every available oppor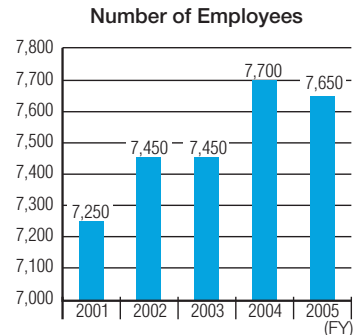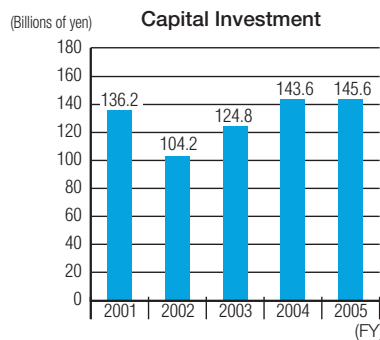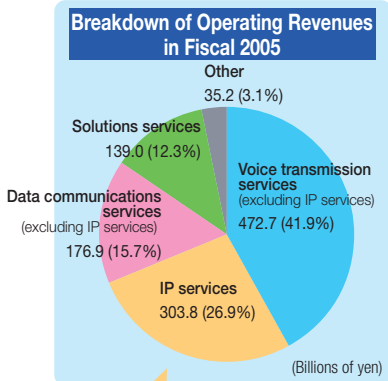tunity. Though it is not easy to understand CSR management in terms of quantitative indicators, I would like to consider the adoption of qualitative indicators to more objectively evaluate our CSR activities and also devise ways to establish, as much as possible, specific and easy-to-understand targets. We will disclose these targets widely among stakeholders and make clear the direction that the Group is moving. In addition, we will share the outcomes and make an effort to turn them into a driving force that continually advances forward the Group's CSR activities.

Masaki Mitsumura
Chairman,
NTT Communications Group CSR Committee
Senior Executive Vice President
NTT Communications Corporation

Economic Performance

Operating Revenues
(Billions of yen)

FY	2001	2002	2003	2004	2005
	1,275.1	1,152	1,106.6	1,090	1,127.8

Operating Income
(Billions of yen)

FY	2001	2002	2003	2004	2005
	75.7	145.3	116.2	69.8	67.5

Net Income (Loss)
(Billions of yen)

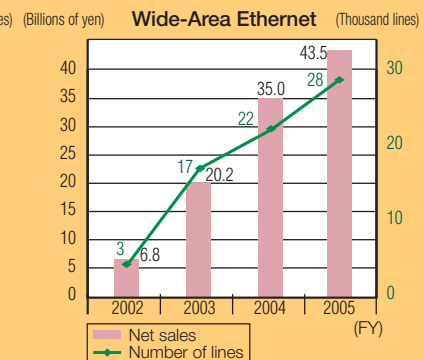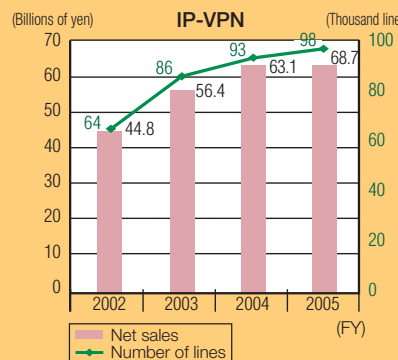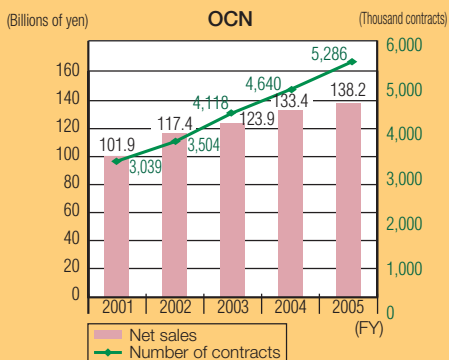| FY	2001	2002	2003	2004	2005
	(410.7)	13.6	24.1	24.6	31.4

Breakdown of Operating Revenues in Fiscal 2005

- Other 35.2 (3.1%)
- Solutions services 139.0 (12.3%)
- Data communications services (excluding IP services) 176.9 (15.7%)
- Voice transmission services (excluding IP services) 472.7 (41.9%)
- IP services 303.8 (26.9%)

(Billions of yen)

Capital Investment
(Billions of yen)

FY	2001	2002	2003	2004	2005
	136.2	104.2	124.8	143.6	145.6

Number of Employees

FY	2001	2002	2003	2004	2005
	7,250	7,450	7,450	7,700	7,650

Major IP Services

OCN
(Billions of yen) / (Thousand contracts)

FY	2001	2002	2003	2004	2005
Net sales	101.9	117.4	123.9	133.4	138.2
Number of contracts	3,039	3,504	4,118	4,640	5,286

IP-VPN
(Billions of yen) / (Thousand lines)

FY	2002	2003	2004	2005
Net sales	44.8	56.4	63.1	68.7
Number of lines	64	86	93	98

Wide-Area Ethernet
(Billions of yen) / (Thousand lines)

FY	2002	2003	2004	2005
Net sales	6.8	20.2	35.0	43.5
Number of lines	3	17	22	28

Overview of the Company

Overview of the Company
(as of June 30, 2006)

Company Name:
NTT Communications Corporation

Location:
1-1-6 Uchisaiwaicho, Chiyoda-Ku, Tokyo 100-8019

Operations Started:
July 1, 1999

Capitalization:
¥211,650,000,000

Shareholder Composition:
Wholly owned subsidiary of NTT Corporation

Number of Employees:
Approximately 7,750 (as of June 30, 2006)

Description of Operations:
Domestic and international telecommunications services

Major Group Companies (as of June 30, 2006)

- Beijing Telecom NTT Engineering Co., Ltd.
- Shanghai NTT Telecommunications Engineering Co., Ltd.
- NTT Communications China Co., Ltd.
- NTT Com Asia Limited
- HKNet Company Limited
- NTT Taiwan Ltd.
- NTT KOREA Co., Ltd.
- NTT MSC SDN BHD
- NTT Communications (Thailand) Co., Ltd.
- NTT Communications (Vietnam) Limited.
- SRI LANKA TELECOM LIMITED.
- NTT Singapore Pte. Ltd.
- P.T.NTT Indonesia
- NTT AUSTRALIA PTY.LTD.
- NTT Communications India Private Limited
- NTT America, Inc.
- NTT MULTIMEDIA COMMUNICATIONS LABORATORIES,INC.
- Verio Inc.
- NTT do Brasil Telecomunicacoes Ltda.
- NTT EUROPE LTD.
- INTERNET MULTIFEED CO.
- NTT Intelligent Planning & Development Co., Ltd
- NTT Com CHEO Corporation
- NTT NaviSpace Corporation
- NTTPC Communications Inc.
- NTT Visual Communications System Inc.
- NTT FANET SYSTEMS CORPORATION
- NTT World Engineering Marine Corporation
- Business Communication System Engineering Co., Ltd
- JSAT Corporation
- Bicom Corporation
- Broadband Engineering Corporation
- PLDT
- StarHub Ltd   etc.

NTT Communications

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