NTT Group

NTT Group

CSR Report 2007

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【About the cover page】
The four spherical objects on the cover page represent communication between people and their communities, communication between people and the global environment, safe and secure communication, and Team NTT communication. The illustration depicts the NTT Group's vision of enabling an increasingly broad range of communications.

Editorial notes

The NTT Group Corporate Social Responsibility Report 2007 has been created to foster communication with all our stakeholders in accordance with the NTT Group CSR Charter. The Charter, which was drafted in fiscal 2007, describes the basic principles behind the implementation of NTT Group CSR activities.

This report begins with a message from the company President, and then goes on to detail the basic vision, policies and systems that guide our CSR activities. The highlight of the report is a description of the next-generation network（NGN）, our major project for fiscal 2007.

Next, we report on progress made within each of the four goals of the NTT Group CSR Charter: communication between people and their communities, communication between people and the global environment, safe and secure communication, and Team NTT communication.

We conclude with a report on communications with our stakeholders.

Please note that we have changed the definition of our fiscal year from this year's report, as a result of which fiscal 2007 (FY2007) in this report means the fiscal year from April 1, 2006 to March 31, 2007.

■ In this report, NTT refers to NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT Group refers to NTT and its group companies, and NTT･･refers to individual companies within the NTT Group.
■ The report has been created with reference to the GRI（Global Reporting Initiative）Sustainability Reporting Guidelines 2002 and the Japanese Ministry of the Environment's Environmental Reporting Guidelines 2007.
■ In order to reduce the consumption of paper resources, this report provides a condensed outline of the essential information related to the NTT Group's CSR activities. More detailed information is provided on our website.

Website: http://www.ntt.co.jp/csr_e/

Reporting scope

Period: April 1, 2006 to March 31, 2007

- Certain activities implemented after March 31, 2007 and outlook for the future are also included.

Organization: NTT and the NTT Group companies（419 companies）

- The figures given for the NTT Group in fiscal 2007 are tabulated from figures for NTT, NTT EAST, NTT WEST, NTT Communications, NTT DATA, NTT DoCoMo, and their group companies（419 companies）. The scope of specific reports is noted in relevant areas.
- Organization names are current as of March 31, 2007. However, some organization names are from fiscal 2008.

Month published: February 2008

Previously published: December 2006

Next report: December 2008（provisional）

About the contents of this report

■ Should any errors be found in this report after publication, a report and table of errata will be provided on our website.
■ The contents of this report refer not only to past events, but also cover future plans and forecasts at the time of publication. Such descriptions include assumptions and judgments based on information that was available at the time of printing. Please note that actual future activities and results may differ from those described herein.

See our CSR website for details of our latest CSR activities.

http://www.ntt.co.jp/csr_e/

Latest information available on our regularly updated CSR website

After this report is published, we will continue to provide timely new information about the NTT Group's CSR initiatives through regular website updates. The latest information can be seen in the Topics section on the top page of the site.

Top page

More detailed information available on the website

The website presents more information than is available in this report, including examples of CSR projects and environmental data, and provides broader, more in-depth information about the NTT Group's CSR activities. There are also links on the site to CSR information of individual NTT Group companies.

Environmental data

A user-friendly website with easy-to-read page layouts

The website has been designed according to NTT official homepage guidelines and was subjected to the check of hearing-impaired, vision-impaired, and other differently abled people, most of them NTT Group employees. This checking process, which is based on the NTT CLARUTY accessibility checklist, helps to ensure that the site is suitably laid out for differently abled and elderly users.

GRI Index

- Screenshots are from the 2006 CSR report website.

Contents

Message from the President

President & CEO
NIPPON TELEGRAPH AND TELEPHONE CORPORATION

We at the NTT Group work as one
within the framework of CSR to promote safety,
security, and prosperity from the customer's point of view.

The world of communications has grown to encompass broadband access and ubiquitous computing on a global scale in a remarkably short period of time. Among the increasingly rapid changes in technology that we have witnessed during this time is the trend toward the merging of disparate technologies, including fixed mobile convergence(FMC — the convergence of fixed-line and mobile telephones), as well as of communications and broadcast media. At the same time, Japanese society now faces numerous social issues, including an aging society with a shrinking population that requires ever greater levels of medical treatment and nursing care, disparities in employment supply and demand, environmental and energy conservation issues, damage from natural disasters and increasing crime. The NTT Group CSR Charter is a statement of our commitment to facing social issues such as these head on, and is intended to serve as a framework for recognition of our corporate social responsibility as well as a reminder that CSR is an integral part of a basic business posture capable of contributing to sustained social development.

Everyone at the NTT Group recognizes the responsibility we bear as a leader in the information and telecommunications industry for promoting activities that will not simply maintain but actually enhance the safety, security, and reliability of our services as well as contribute to the development of ubiquitous broadband communications. To this end, a field trial of NTT's next-generation network（NGN）began in December 2006 in preparation for the offering of service to the general public. We have also made every effort to enhance the reliability of emergency communications networks as well as to strengthen our ability to guarantee critical communications and restore interrupted services in the event of a large-scale natural disaster. Despite these efforts, our Hikari Denwa optical fiber telephone service has suffered major failures that caused our customers great inconvenience and concern. We are doing everything in our power to prevent further failures through strengthening both the physical infrastructure and operations management of the system. We are also redoubling our efforts to protect the Earth's environment by further enhancing our ongoing activities for combating global warming and other environmental initiatives.

We feel that continued efforts such as these are part and parcel of the NTT Group's corporate social responsibility, and we undertake a wide variety of citizenship activities in cooperation with the communities we serve. Each NTT Group company fulfills its responsibility to undertake social, economic, and environmental activities suited to its own unique business situation. Working as one to promote corporate social responsibility as described in the NTT Group CSR Charter, we strive to enhance our corporate value as a customer-oriented enterprise.

To inform our customers and all other stakeholders about these activities, we are once again pleased to make our annual CSR report available to the public. This year we have for the first time included a third-party opinion from a representative of our stakeholders, and we look forward to hearing the candid comments and suggestions of our readers regarding the content of this year's report.

October 2007

Outline of the NTT Group and the role of the holding company

NTT Group companies

(as of August 1, 2007)

NTT EAST **NTT WEST**

Regional communications businesses

● NIPPON TELEGRAPH AND TELEPHONE EAST CORPORATION ● NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION

NTT EAST and NTT WEST provide intra-prefectural domestic communications services as well as related businesses. This mainly involves broadband fixed voice-related services, IP/packet communications services, and sales of communications equipment.

Regional communications business support group

▼Regional communications related businesses	▼Engineering businesses	▼Telemarketing businesses
NTT EAST-TOKYOMINAMI CORPORATION	NTT INFRASTRUCTURE NETWORK CORPORATION	NTT Solco Corporation
NTT-ME CORPORATION	AIREC ENGINEERING CORPORATION	▼Others
NTT WEST- KANSAI CORPORATION	▼Telephone directory businesses	NTT CARD SOLUTION CORP.
NTT MARKETING ACT CORPORATION	NTT DIRECTORY SERVICES Co.	
NTT NEOMEIT CORPORATION	NTT BUSINESS INFORMATION SERVICE, INC.	and others

Long distance and international communications businesses

● NTT Communications Corporation

NTT Communications provides inter-prefectural domestic communications services as well as international communications services and related businesses. This includes system integration for corporate services, fixed voice-related services, and IP/packet communications services.

Long distance and international communications business support group

▼International communications businesses	NTT Taiwan Ltd.	Plala Networks Inc.
NTT America, Inc.	NTT do Brasil Telecomunicacoes Ltda.	NTT NaviSpace Corporation
NTT Australia Pty. Ltd.	NTT KOREA Co., Ltd.	▼Others
NTT Europe Ltd.	PT. NTT Indonesia	Verio Inc.
NTT MSC Sdn Bhd	▼Internet related businesses	NTT World Engineering Marine Corporation
NTT Com Asia Limited	NTT Resonant Inc.	
NTT Communications (Thailand) Co., Ltd.	NTTPC Communications Inc.	and others

Data communications businesses

● NTT DATA CORPORATION

NTT DATA provides system integration, network system and related services for the corporate, finance, and public sectors.

Data communications business support group

▼System Integration Services	▼Network system services	ATION
NTT DATA SYSTEMS CORPORATION	NTT DATA FINANCIAL CORPORATION	NTT DATA TOKYO SMS CORPORATION
NTT DATA SYSTEM TECHNOLOGIES INC.	▼Others	NTT DATA CUSTOMER SERVICE CORPORATION
NTT DATA SYSTEM SERVICE CORPORATION	NTT DATA INSTITUTE OF MANAGEMENT CONSULTING, INC.	NTT DATA INTERNATIONAL L.L.C.
NTT DATA TECHNOLOGY CORPORATION	NTT DATA MANAGEMENT SERVICE CORPOR-	
NTT DATA CREATION CORPORATION		and others

Mobile communications businesses

● NTT DoCoMo, Inc. ● Eight DoCoMo regional subsidiaries

NTT DoCoMo provides mobile phone (FOMA and mova), packet communications, satellite phone, international phone, and other services, as well as selling handsets and other equipment for each service. Other services include PHS business and wireless LAN service.

Mobile communications business support group

DoCoMo Service Inc.	DoCoMo Mobile Inc.	DoCoMo Systems, Inc.	DoCoMo Technology, Inc.
DoCoMo Engineering Inc.	DoCoMo Support, Inc.	DoCoMo Sentsu, Inc.	DoCoMo Businessnet Inc.
			and others

Other businesses

Other businesses include system integration (SI) and information processing, advanced technology development, engineering, financing, real estate, and administrative services.

▼SI and information processing businesses	NTT Advanced Technology Corporation	▼Real estate businesses	InfoCom Research, Inc.
NTT COMWARE CORPORATION	NTT Software Corporation	NTT Urban Development Corporation	▼Others
NTT INTERNET INC.	▼Engineering businesses	▼Administrative services businesses	NTT LOGISCO Inc.
▼Advanced technology development businesses	NTT FACILITIES, INC.	NTT BUSINESS ASSOCIE Co.,Ltd.	NTT ADVERTISING, INC.
NTT Electronics Corporation	▼Financing businesses	NTT BUSINESS ASSOCIE TOKYO Co., Ltd	NTT LEARNING SYSTEMS CORPORATION
	NTT FINANCE CORPORATION	▼Think tank businesses	and others

NTT Group

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

Role of NTT (holding company) within the NTT Group

The NTT Group consists of NTT and subsidiaries and affiliates (including 419 consolidated subsidiaries). The Group's main businesses are regional communications, long distance and international communications, mobile communications and data communications.

NTT formulates overall group business strategy in consultation with the individual group companies, as well as providing suitable and appropriate advice and facilitation. Based on this support, the individual group companies run themselves as independent business entities, taking responsibility for their own management.

NTT Group structure

Business segment	Major group companies (percent owned)	March 2007 Operating revenues* by segment (in trillions of yen)	Employees by segment (in thousands)
Regional communications businesses	NTT EAST (100%)	4.3	118
	NTT WEST (100%)		
Long distance and international communications businesses	NTT Communications (100%)	1.3	13
Data communications businesses	NTT DATA (54.2%)	1.0	22
Mobile communications businesses	NTT DoCoMo (63.4%)	4.8	22
Other businesses	NTT FACILITIES NTT Urban Development NTT COMWARE NTT FINANCE NTT Electronics NTT BUSINESS ASSOCIE	1.2	25

NTT

Consolidated subsidiaries →419 companies
Affiliates (Equity method) →96 companies

As of March 31, 2007

*Includes transactions between business segments.

Overview of NIPPON TELEGRAPH AND TELEPHONE CORPORATION

● **Name**
NIPPON TELEGRAPH AND TELEPHONE CORPORATION (NTT)

● **Head office**
3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8116, Japan

● **Date of establishment**
April 1, 1985

● **Paid-In capital**
¥937.95 billion (As of March 31, 2007)

● **Number of employees** (As of March 31, 2007)
2,900 employees (199,750 employees on a consolidated basis)

● **Number of consolidated subsidiaries**
419 (As of March 31, 2007)

● **Website**
http://www.ntt.co.jp/index_e.html

● **Organization chart**
(as of August 1, 2007)

Board of Directors
Chairman — President
Board of Audit — Corporate Auditors
Auditor's Office

Corporate Strategy Planning Department
Technology Planning Department
Research and Development Planning Department
Finance and Accounting Department
General Affairs Department

Corporate Business Strategy Division

Cyber Communications Laboratory Group

Information Sharing Laboratory Group

Science and Core Technology Laboratory Group

Intellectual Property Center

・Public Relations Office ・Global Business Strategy Office
・Next-Generation Network Promotion Office (Environmental Protection Office)
・Investor Relations Office
・Internal Control Office ・President's Office (CSR Promotion Office)

・Cyber Solutions Laboratories
・Cyber Space Laboratories

・Service Integration Laboratories
・Information Sharing Platform Laboratories
・Network Service Systems Laboratories
・Access Network Service Systems Laboratories
・Energy and Environment Systems Laboratories

・Network Innovation Laboratories
・Microsystem Integration Laboratories
・Photonics Laboratories
・Communication Science Laboratories
・Basic Research Laboratories

R&D activities

NTT has three laboratory groups: the Cyber Communications Laboratory Group, the Information Sharing Laboratory Group, and the Science and Core Technology Laboratory Group. These groups provide NTT with the R&D muscle for the commercialization of next-generation networks and the development of basic technologies that will support the creation of safe, secure, and convenient ubiquitous broadband services. Furthermore, through the effective use of our "Comprehensive Commercialization Functions" and in close collaboration with the NTT Group companies, NTT has steadily commercialized its R&D results.

Role of NTT R&D

Customer

NTT EAST NTT WEST NTT Communications NTT-ME NTT COMWARE NTT FACILITIES
NTT DATA NTT DoCoMo NTT Electronics NTT Advanced Technology NTT Resonant etc.

Applied R&D
・System development/customization etc.
Provision of services

NTT R&D

Academic societies
Standardization activities

Basic R&D
・Basic technology for developing new services
・Basic and elemental technology for creating new principles and devices, etc.

Overview of reporting organization

Consolidated financial statement for fiscal year 2007

In fiscal 2007, the NTT Group continued to implement the NTT Group Medium-Term Management Strategy (announced November 2004) and respond to customer demand by further deploying the B FLET'S optical fiber access service and the FOMA third generation (3G) mobile communications service. To provide solutions services for our corporate customers, we developed new businesses through alliances and joint investments with companies outside the Group. We also began verification experiments for the launch of full commercial services for our next-generation network (NGN).

Consolidated performance for fiscal 2007 showed a decline in voice-related revenue owing to a drop in fixed-line subscriptions, but revenue from B FLET'S, FOMA, and other IP-related services and system integration revenue increased. As a result, NTT Group consolidated operating revenue for fiscal 2007 amounted to 10,760.6 billion yen (year-on-year increase of 0.2%), consolidated operating income to 1,107 billion yen (year-on-year decrease of 7.0%), and consolidated net income to 476.9 billion yen (year-on-year decrease of 4.4%).

We paid total dividends for fiscal 2007 of 8,000 yen per share, divided into midterm and end-of-term dividends.
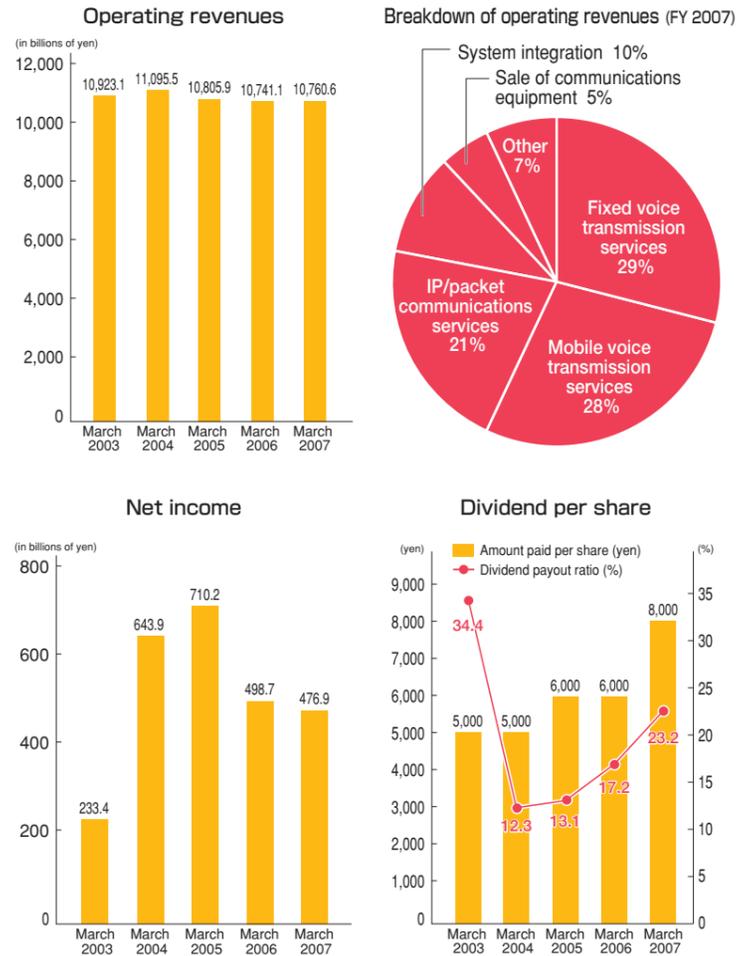
Website>>> http://www.ntt.co.jp/ir/library_e/
● Financial results, Annual reports

Operating revenues
(in billions of yen)

March 2003	March 2004	March 2005	March 2006	March 2007
10,923.1	11,095.5	10,805.9	10,741.1	10,760.6

Breakdown of operating revenues (FY 2007)

- System integration 10%
- Sale of communications equipment 5%
- Other 7%
- Fixed voice transmission services 29%
- Mobile voice transmission services 28%
- IP/packet communications services 21%

Net income
(in billions of yen)

March 2003	March 2004	March 2005	March 2006	March 2007
233.4	643.9	710.2	498.7	476.9

Dividend per share
(yen)

- Amount paid per share (yen)
- Dividend payout ratio (%)

	March 2003	March 2004	March 2005	March 2006	March 2007
Amount	5,000	5,000	6,000	6,000	8,000
Payout ratio	34.4	12.3	13.1	17.2	23.2

Consolidated and major company financial highlights (partial) for FY2007
(in billions of yen)

	NTT Group consolidated <US GAAP>	NTT EAST (Japan GAAP, non-consolidated)	NTT WEST (Japan GAAP, non-consolidated)	NTT Communications (Japan GAAP, non-consolidated)	NTT DATA (Japan GAAP, consolidated)	NTT DoCoMo (US GAAP, consolidated)
Operating revenue Year-on-year increase/decrease	10,760.6 +0.2%	2,061.3 -3.0%	1,951.5 -3.8%	1,145.4 +1.6%	1,044.9 +15.2%	4,788.1 +0.5%
Operating expenses Year-on-year increase/decrease	9,653.5 +1.1%	2,001.4 -2.8%	1,931 -3.3%	1,068.1 +0.7%	954.6 +11.0%	4,014.6 +2.1%
Operating income Year-on-year increase/decrease	1,107 -7.0%	59.9 -9.2%	20.4 -36.1%	77.3 +14.5%	90.2 +92.6%	773.5 -7.1%
Pre-tax income Year-on-year increase/decrease	1,138 -12.9%	*90.3 +7.3%	*54 -4.4%	*77.8 +8.3%	*85.7 +104.1%	772.9 -18.8%
Net income Year-on-year increase/decrease	476.9 -4.4%	84.3 +64.5%	28.3 -13.3%	30.3 -3.5%	50.6 +79.6%	457.3 -25.1%

＊For NTT EAST, NTT WEST, NTT Communications, and NTT DATA, figures in the pre-tax income row indicate recurring income.

NTT Group's Medium-Term Management Strategy

This is a period of great transition in the information communications market, driven by the rapid spread of broadband access and IP technology, and growing convergence and integration between fixed and mobile communications, and between telecommunications and broadcasting.

In response to these changes, the NTT Group announced the NTT Group Medium-Term Management Strategy in November 2004. The aim is to shift roughly half the number of conventional fixed-line subscribers to optical fiber access and NGN services by fiscal 2011. Building around this framework, NTT would work to increase corporate value by developing the ubiquitous broadband communications market, and constructing a safe, secure, and convenient communications network environment.

NTT Group Medium-Term Management Strategy (announced November 2004)

Management objectives

- Leverage NTT's all-round strengths to actively develop the ubiquitous broadband communications market. Contribute to the realization of the e-Japan Strategy and u-Japan Policy.
- Provide customers with a safe, secure, and convenient communications environment, and build the foundations for broadband access. Smoothly migrate from fixed line service to IP telephone service and from copper wire to optical fiber.
- Work to increase corporate value and achieve sustainable growth.

Specific initiatives

- Development of ubiquitous broadband communications services to drive convergence between fixed line and mobile communications
- Construction of a high-quality and flexible NGN that guarantees security
- Smooth migration from existing fixed-line phones to IP telephones, and from copper wire to optical fiber
- Expansion of business opportunities by leveraging ubiquitous broadband communications services
- Building of a firm financial foundation and strengthening our competitiveness

Initiatives for promoting the NTT Group's Medium-Term Management Strategy (announced November 2005)

NTT announced action plans in November 2005 designed to drive the implementation of the NTT Group Medium-Term Management Strategy.

Under these action plans, the group announced two concrete initiatives: the building of an NGN, and the development of ubiquitous broadband communications services.

Action Plans

NGN deployment

- ● **Basic concepts**
  - ・A safe, secure, and convenient network handling rapid increase of IP traffic
  - ・Providing services ensuring Quality of Services (QoS)
  - ・IP-based network enabling the provision of seamless fixed (intra- & inter-prefectural) and mobile communications
  - ・A network conforming to international standards
  - ・Disclosure of interface to the application layer enabling service providers to provide a wide array of application services
  - ・An open network ensuring security and connectivity (inter-connectivity) with other carriers and ISPs
- ● Designing roadmap and conducting field trial

Ubiquitous broadband service development

- ● **Network services**
  - ・Highly-functional, highly-reliable fiber-based services
  - ・High-speed and advanced mobile services and multi-functional wireless handsets
  - ・Fixed-mobile Convergence
- ● Upper layer services enhancement including Internet connection and portal service
- ● Corporate services enhancement
- ● Promotion of convergence and partnership between telecommunication and broadcasting
- ● Provision of one-stop customer services
- ● Expansion of international business and standardization activities
- ● Efforts directed to realize a safe and secure society as envisioned by New IT Reform Strategy and u-Japan Policy

Basic approach to CSR

The NTT Group's vision for society and its own role in creating that society

Nothing could be more fundamental to the fulfillment of our CSR than sound corporate conduct. This requires the appropriate implementation of a wide range of initiatives related to such areas as compliance with laws and regulations, the application of high ethical standards to business conduct (corporate ethics), the active disclosure of financial and other information that the public has a right to know (corporate information disclosure), and mechanisms for the constant monitoring of business conduct (corporate governance).

We feel that addressing the expectations of our customers and other stakeholders by implementing concrete endeavors based on the principles of the NTT Group CSR Charter — not only in our everyday business of providing quality products and services, but also through environmental protection, volunteer and other social contribution activities — contributes to our corporate value and our sustained development.

We of the NTT Group believe that by sustaining our CSR activities based on our four communication goals, we can contribute to the creation of a safe, secure, and prosperous society through communications that serve people, communities and the global environment.

Prosperous society

- Sustained development
- Society
- Environment
- Raising corporate value
- Economics

Volunteer work and other social contribution activities

Environmental protection activities

Provision of quality products and services, and other corporate activities

The structure supporting sound corporate conduct

Corporate data disclosure

Corporate ethics

Corporate governance

Sound corporate conduct
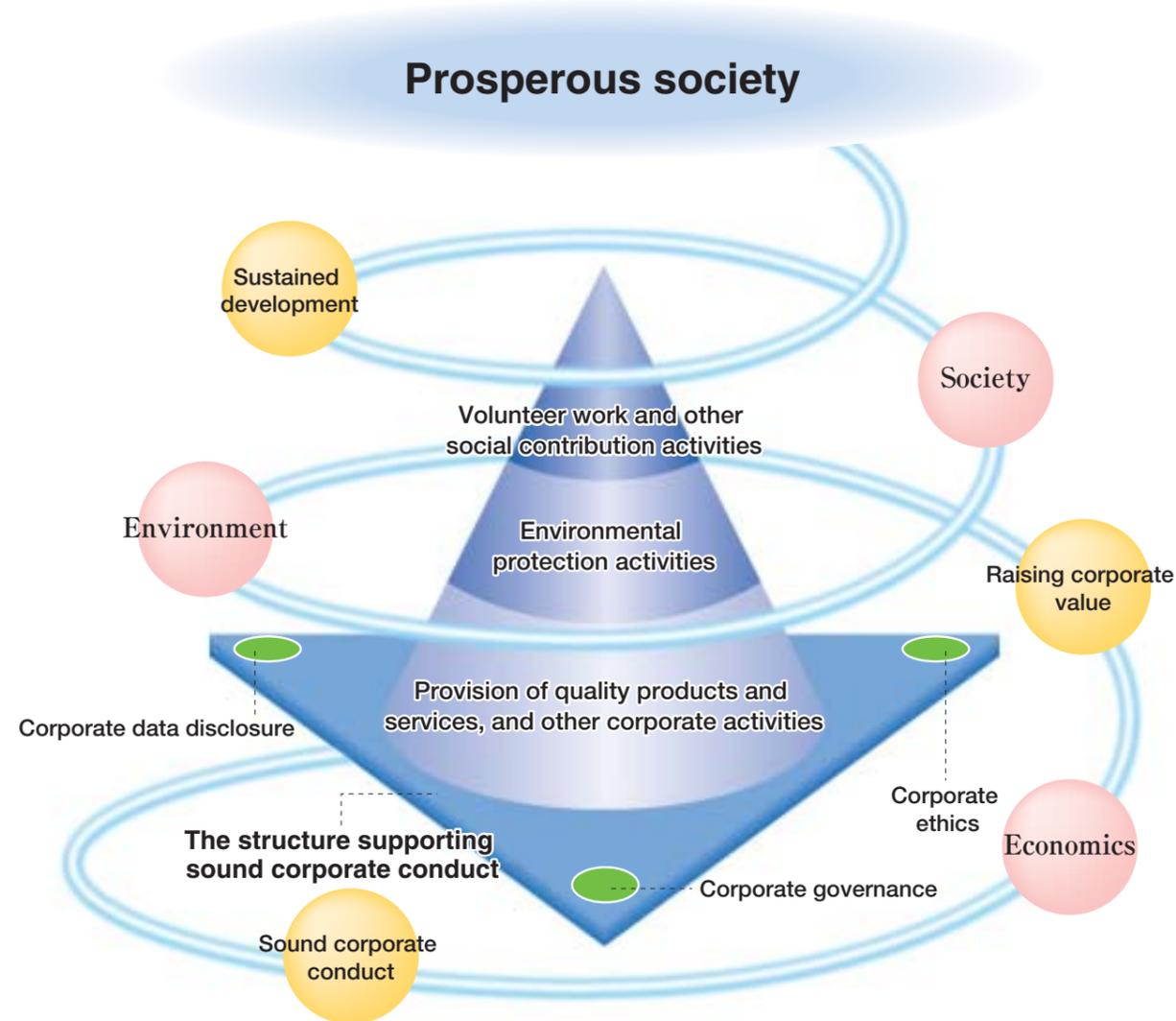
Promoting CSR across the NTT Group

1. Why we enacted the NTT Group CSR Charter
The NTT Group has long sought to fulfill its responsibilities as a corporate citizen through implementing a range of CSR activities, but we drew up the NTT Group CSR Charter to more clearly define fundamental principles for the active implementation of CSR activities by Group companies.

2. Features of the NTT Group CSR Charter
The NTT Group CSR Charter consists of a statement of our CSR commitment and a description of the following four CSR goals linked by the common theme of communication: communication between people and their communities, communication between people and the global environment, safe and secure communication, and Team NTT communication.

3. The process of drafting the Charter
To draw up the Charter, we first gathered basic information about CSR activities, including existing CSR directions and thinking within NTT and NTT Group companies, as well as ideas and examples of initiatives from leading companies in Japan and abroad, and trends in CSR guidelines and the like.

After organizing this basic information, CSR leaders of major Group companies held meetings to debate and come to a consensus on the desirable form and direction of NTT Group CSR activities so as to ensure that the Charter was endowed with sufficient substance to promote and develop CSR within the Group.

We also sought out objective views in hearings with CSR professionals, using their advice on points of discussion, direction, and the wording of the Charter itself to create a draft. This was then circulated among Group companies to reach a final consensus, after which the Charter was enacted in June 2006.

Drafting the Charter

STEP 1	STEP 2	STEP 3	STEP 4	
Gathering of basic information	Internal discussion 1 Major Group companies CSR managers meetings	External consultation Professional advisors	Internal discussion 2 Achievement of consensus among Group companies	NTT Group CSR Charter Enacted June 2006

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 environment-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.

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

- Safe and secure communication
- Team NTT communication
- Communication between people and their communities
- Communication between people and the global environment

【Activity categories】
- Leveraging information and communication technology (ICT) to address issues related to declining population and aging society
- Reduction of environmental impact to contribute to the creation of a sustainable society
- Ensuring information security and building a sound user environment
- Contributing to society through building and maintaining communications infrastructure
- The social mission of all who work under the NTT name

Management organization

Corporate governance

1. Basic stance

The NTT Group considers corporate governance to be a matter of vital importance in maintaining our customers' and the public's trust and ensuring its sustained development. The Group's corporate governance efforts are directed at ensuring the following:
(1) Sound management
(2) Appropriate decision-making and execution of business
(3) Clear accountability
(4) Full compliance with laws and regulations

2. Composition of board of directors and board of audit

NTT maintains a board of 12 directors, two of whom are outside directors.
In principle, the board of directors meets once per month to make decisions and report on important management issues.
NTT maintains a board of audit, which is composed of five members, referred to as corporate auditors, of whom three are outside corporate auditors.

3. Executive Officers Meeting and committees

In principle, important company matters are discussed and decided by NTT's Executive Officers Meeting, which is made up of the President, Senior Executive Vice Presidents, full-time directors, and the heads of staff organizations. The Executive Officers Meeting members meet once every week or two, and held 33 meetings in fiscal 2007. It also oversees the activities of committees charged with discussing specific areas of company and group management strategy. In principle, each committee is chaired by either the President or a Senior Executive Vice President, and has a membership composed of directors and other senior executives involved in the specific areas for which each committee is responsible. Committee meetings are held as occasion demands.

4. Internal control system

Though NTT already had compliance, risk management, and other internal control systems in place, in conjunction with the coming into effect of Japan's new Corporation Law (May 2006), the board of directors adopted a basic policy related to the creation of a system of internal controls for the NTT Group as a whole to ensure the appropriate execution of duties, and is working to enhance Group internal control systems.
NTT also reformed its financial reporting internal control system in line with the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley Act) Section 404. Tests conducted to assess the reforms and operation of the system revealed no major problems and confirmed the effectiveness of the new system.

> **Website** >>> http://www.ntt.co.jp/about/tousei.html (in Japanese only)
> ● Internal control system: Basic policy

5. Audits by the auditors

Each corporate auditor of NTT audits the performance of NTT's directors in the execution of their duties as occasion demands. The corporate auditors also endeavor to strengthen the auditing system by working closely with the NTT Group's audit firm through means such as periodic discussion of audit plans and results.

6. Internal audits

NTT's Internal Control Office conducts inspections of the status and operating effectiveness of internal controls across the group as a whole through such measures as conducting standardized group audits that target all group companies and checking the work of internal auditors in each group company. The Internal Control Office also continues the work of building, operating and improving internal control systems across the NTT Group, including IT controls.

Corporate governance structure

Compliance

1. Corporate Ethics Charter

Based on a core belief that it is imperative to conduct business in compliance with laws and the highest ethical standards, NTT enacted the NTT Group Corporate Ethics Charter in November 2002.
The Charter, which applies to all directors and employees of the NTT Group, lays out the basic principles of corporate ethics and provides concrete guidelines for ethical behavior.
The Charter is intended to remind everyone of their duty as members of a communications group to prevent dishonesty and misconduct, and to ensure that they conduct themselves according to the highest ethical standards in both our private and public activities, and avoid unethical behavior such as disclosing corporate secrets or exchanging excessive favors with customers, suppliers, and others.

2. Thorough implementation of corporate ethics

In order to ensure the effectiveness of the Charter, we conduct assessments of ethical awareness among employees, as well as running CSR and corporate ethics seminars for employees. Each company has in place a system for employees to report and consult on ethical issues. In addition, employees can also go outside their company through the group-wide Corporate Ethics Help Line that we have established.
In line with Japan's Whistleblower Protection Act and other laws, the NTT Group has also since April 2006 accepted reports from companies outside the group that have dealings with the NTT Group.

NTT Group Corporate Ethics Charter

❶ 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.

❷ 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.

❸ 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 member 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.

❹ 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.

❺ Every officer and employee of the 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.

❻ 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.

❼ 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.
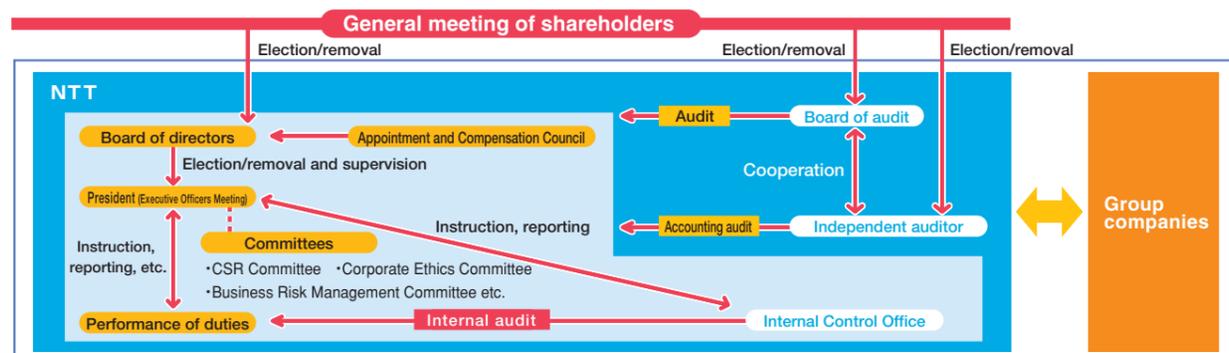
Risk management

The NTT Group functions within a rapidly changing business climate marked by increasingly fierce competition, and the companies of the NTT Group also face a wide variety of business risks from natural disasters and other unforeseen circumstances.
Seeking to minimize potential risks through putting priority on prevention and readiness, we have prepared a standard manual for distribution to all member companies to assist in their efforts to manage business risk and ensure a unified approach to risk management. With the help of this manual, we work to anticipate and prepare for risks, so that should they arise, we are able to minimize the impact on our stakeholders.
Each member company also prepares its own manual or other mechanisms tailored to its specific business activities and environment in order to manage and mitigate business risks.

Management organization

CSR organization

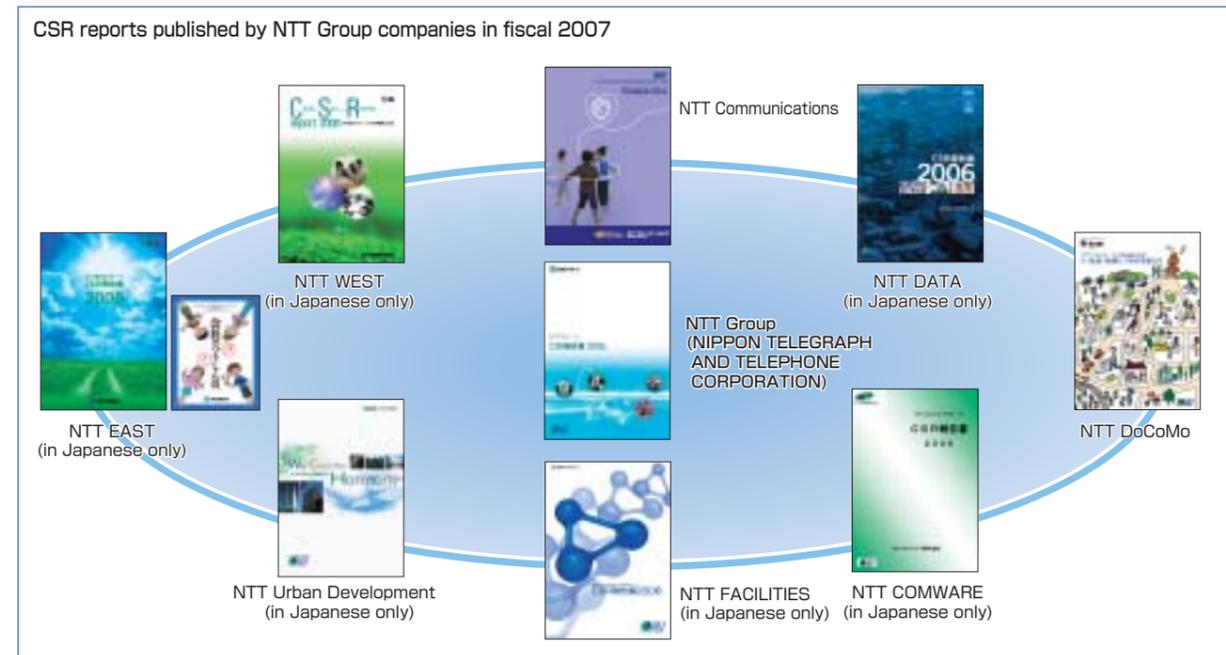### 1. CSR Committee and organizations to promote CSR

NTT created a CSR Committee chaired by a Senior Executive Vice President in June 2005 to establish a clear management structure for the implementation of the NTT Group's CSR activities. Based on its consideration of group-wide thinking and measures that will further promote CSR activities of the NTT Group as a whole, the CSR Committee drew up the NTT Group CSR Charter in 2006 as a vehicle for driving the implementation of the NTT Group's CSR initiatives.

With the establishment of the CSR Committee, we brought the existing Global Environmental Protection Promotion and Social Contribution Promotion Committees under its control, rationalizing the organization to promote CSR initiatives. Furthermore, in order to unify CSR initiatives across the Group, we hold regular Group CSR Liaison Meetings at which the CSR Committee shares information on the latest issues under discussion, and individual companies in the group also explain their CSR initiatives to promote the horizontal development of initiatives.

2. Publishing CSR reports

The NTT Group publishes the NTT Group CSR Report (this publication) once a year to communicate the NTT Group basic approach to CSR and to present representative NTT Group initiatives being implemented under the four goals of the NTT Group CSR Charter. This report is published in Japanese and English both in printed form and on the NTT Group CSR website. By distributing this information as widely as possible, we aim to further nurture communication as described in the CSR Charter.

Group companies also publish CSR reports that introduce their own initiatives in more detail.

NTT Group CSR organization

Board of directors
↓
President (Executive Officers Meeting)

Committees
- CSR Committee
  - Global Environmental Protection Promotion Committee >>>See p. 29 for details.
  - Social Contribution Promotion Committee
- Corporate Ethics Committee
- Business Risk Management Committee

Group CSR Liaison Meetings
CSR Promotion WG

CSR reports published by NTT Group companies in fiscal 2007

NTT Communications
NTT WEST (in Japanese only)
NTT DATA (in Japanese only)
NTT EAST (in Japanese only)
NTT Group (NIPPON TELEGRAPH AND TELEPHONE CORPORATION)
NTT DoCoMo
NTT Urban Development (in Japanese only)
NTT FACILITIES (in Japanese only)
NTT COMWARE (in Japanese only)

NTT Group CSR website   http://www.ntt.co.jp/csr_e/

Pioneering New Styles of Communication with NGN

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.

In December 2006, the NTT Group began field trials of its next-generation network (NGN), including the opening of showrooms in both Tokyo and Osaka, in preparation for launching commercial services at a later date. We are proud to feature NGN in this report as a highlight of our CSR activities for fiscal 2007.

NOTE (Otemachi, Tokyo)   NOTE (Umeda, Osaka)

Index

The future of communications is now in sight.

Entering a Prosperous New World of Ubiquitous Broadband Communications via NGN

NTT President and CEO Satoshi Miura talks about the latest developments in the Group's NGN implementation efforts.

NGN, the new world-class communications infrastructure

NTT's next-generation network, or NGN, is an optical fiber-based full IP network that combines the stability and reliability of a telephone network with the convenience and economy of the Internet.

Under NTT's current Medium-Term Management Strategy, which went into effect in November 2004, NGN is positioned as a mainstay for future NTT business, and is currently under development for practical applications.

We are confident that the implementation of a new world-leading communications infrastructure compliant with international standards will help to solve many of the social and economic issues now faced by Japan, and contribute to its further growth.

New services developed with NGN

Any discussion of the next generation of information and com-munication technology is sure to refer to information digitization, IP networks, and ubiquitous broadband communications. These technologies are already evident in many emerging styles of communication, such as the increasingly diversified and sophisticated use of the Internet or the convergence of fixed-line and mobile communications and of communications and broadcasting. Responding to such changes in technology and market needs, NGN is expected to become a driving force in the creation of new business models and services.

Building the NGN together with our partners

Openness and interconnectivity are indispensable attributes of any network, because a network can only fulfill its true potential if it is used by large numbers of people. Seen in this light, it is obvious that the NTT Group could not successfully create such an NGN entirely on its own.

From the very start of development, we have based our NGN initiatives on the concepts of openness and collaboration, and we will continue to enable open access with the networks of other service providers and work with our partners in other businesses and industries to create new value and services.

Monitor service already underway

In addition to the 29 companies participating since the end of 2006, about 500 monitors including ordinary households also joined the NGN field trials in April 2007.

Field trials are designed to enable us not only to test our technology, but also to gain a clear understanding of market needs as we work toward making NGN available to the general public by the end of fiscal 2008.

We will continue to put feedback from our partners, monitors, and customers to use in further developing NGN, and we feel that with NGN, the future holds much for all of our stakeholders to look forward to.
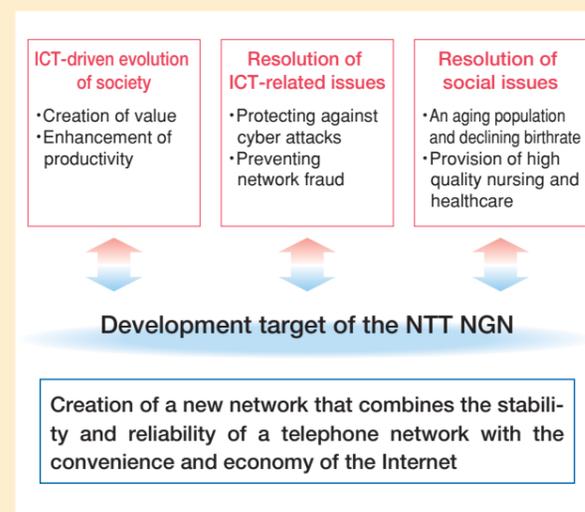

The roles of NGN

NGN is designed to play three major roles.

1. To further drive the evolution of society through ICT and contribute to the creation of value and enhancement of productivity
2. To contribute to the resolution of ICT-related downside issues such as cyber-attacks and network fraud
3. To contribute to the resolution of social issues now faced by Japanese society, including an aging population and declining birthrate, and the need for ever greater levels of nursing and healthcare

In order to fulfill these roles, however, existing telephone systems and best-effort Internet service are not sufficient. We have undertaken the development of NGN precisely because we consider the establishment of a new network that combines the stability and reliability of a telephone network with the convenience and economy of the Internet to be indispensable to future communications.

NTT Group NGN initiatives

ICT-driven evolution of society	Resolution of ICT-related issues	Resolution of social issues
・Creation of value ・Enhancement of productivity	・Protecting against cyber attacks ・Preventing network fraud	・An aging population and declining birthrate ・Provision of high quality nursing and healthcare

Development target of the NTT NGN

Creation of a new network that combines the stability and reliability of a telephone network with the convenience and economy of the Internet

NGN attributes

Four major NGN attributes.

1. Quality of service
NGN has been designed to allow any given application to be assigned the most suitable of four quality of service (QoS) classes: First Priority, High Priority, Priority, and Best Effort. The First Priority class ensures sufficient bandwidth to guarantee clear transmission over the network of audio signals or high-definition video data.

2. Security
NGN helps prevent spoofing and other kinds of identity theft by checking caller IDs such as IP address and telephone number allocated to a specific line. Other security features include the detection and blocking of unusually high levels of traffic at network gateways.

3. Reliability
NTT's accumulated expertise in ensuring the safety and security of telephone lines has been incorporated into NGN, with redundancy built into lines and equipment, and design that enables appropriate traffic control and the securing of critical communications when network traffic is congested.

4. Open interface
NGN is designed to accommodate a wide variety of applications, and provides functions compatible with interactive communications utilizing high-quality audio and video signals, unicast and multicast distribution of content, Internet connectivity, and high-quality, next-generation Ethernet functionality. NGN's open network interface specification is intended to promote the development of new communications applications together with third parties in other fields and businesses.

NGN has been designed to accommodate these advanced features in order to promote the creation of a flexible and secure communications environment for the development of new services and businesses.

Communications in the NGN Era

NGN combines the stability and reliability of a telephone network with the convenience and economy of the Internet, and enables the safe and secure transmission of large volumes of data at high speeds. Whether for personal, business, or community applications, NGN helps users to enrich their communication experiences.

The NTT Group is promoting NGN as a major step in the realization of a society served by ubiquitous broadband communications that can help resolve ICT-related downside issues and other social issues.

Presentation via high-definition teleconference

NGN for business

Running a home-based business while keeping an eye on children

The Hikari family

Enjoying on-demand high-definition video on both TV and PC

NGN for the home

Remote medical examination from the home

NGN for society

The Hikari grandparents who live elsewhere

Remote monitoring of family health and home security

Having a chat via high-definition IP videophone

NGN Field Trials ❶

Ubiquitous Protection and Nursing Care

Our NGN initiatives are based on the concepts of openness and collaboration. Here we introduce two examples of new styles of communication proposed by corporate field trial participants as solutions for some of the issues facing a society with an aging and shrinking population.

Keeping track of schoolchildren on their way to and from school, and providing parents/guardians with real-time images

We live in an age in which parents and guardians of schoolchildren are always grateful for help in protecting their children from crime.

Matsushita Electric Industrial Co., Ltd. is now conducting field tests on a system that uses RFID tags to help keep track of children on their way to and from school and provide parents and guardians with real-time images of the children's location via RFID tag readers and network cameras set up in strategic locations.

Earlier such systems used the Internet and accordingly lacked the level of security required to protect the privacy of the children. Matsushita's latest system, however, is able to use NGN's caller ID functionality to guard against spoofing and ensure that information and video images of children's whereabouts are viewable only when detected and only on the specific terminals of pre-registered parents or guardians.

NGN's QoS control functions moreover ensure that sufficient bandwidth is available for the real-time transmission of high quality video images that provide a clear picture of the child concerned.

Images and location information are viewable only on pre-registered terminals.

Secure remote monitoring of the health of people receiving nursing care

As Japan's population continues to age and shrink in size, more and more people see the provision of nursing care as an increasingly serious social issue. Hitachi, Ltd. is now field testing a new system that enables remotely located caregivers to monitor weight, blood pressure, and other health parameters while ensuring the privacy of those receiving care.

This system, which consists of a blood pressure gauge, weight scales, and a bed mat (known as Ai Mat) equipped with built-in sensors that monitor the subject's pulse, breathing, and body movements while sleeping, transmits all of this data automatically via NGN without the patient needing to do anything other than take routine measurements. Moreover, the NGN caller ID function can ensure that this information remains secure and unseen by unauthorized third parties.

The remote caregiver is able to monitor the subject's condition via NGN and respond to any changes in the patient's health via videophone, providing safe and secure nursing care.

Caregivers can monitor the health of care recipients even from remote locations.

The views of field trial participants

Confirming the reliability of NGN

The objective of this field trial is to test the reliability of our ubiquitous protection system in actually transmitting location information and video images to parents or other guardians. Thanks to this trial, I've been able to see for myself just how well NGN handles the secure transmission of high-quality data, and I'm convinced that it is an ideal network for this kind of monitoring system. I hope to make the most of this experience to make further improvements to the system and also develop other applications.

Yosuke Tajika, Ph.D.
Manager
IP Access System Group,
Network Development Center,
Matsushita Electric Industrial
Co., Ltd.

Creating New Value

Participation in this field trial came only after extensive discussion as to how we were going to approach the provision of nursing care. We have established a strong working relation with our counterparts in NTT through discussing various aspects of nursing care provision. We hope that this testing of the connectivity of our service control platform with NGN will lead to the development and offering of new and valuable nursing, healthcare and other services that take full advantage of the attributes of NGN.

Naoki Kinoshita
Department Manager
Broadcasting and
Telecommunication Business
Incubation Department,
Network Business Operations,
Network Systems Solutions
Division,
Hitachi, Ltd.

NGN Field Trials ❷

IP Retransmission of Digital Terrestrial Broadcasts

In line with the policy of the Ministry of Internal Affairs and Communications (MIC) program for nationwide deployment of digital terrestrial broadcast, all terrestrial broadcast stations will complete their transition to digital format in July 2011. NGN too will contribute to this transition as an essential part of the communications infrastructure of the future.

Providing stable digital broadcasts in areas with poor signal reception

The current system of analog terrestrial broadcasts is scheduled for retirement on July 24, 2011, by which time all terrestrial stations will have completed the transition to the new digital broadcast format. MIC has proposed a policy promoting high-definition digital terrestrial broadcast retransmission for IP TV starting in 2008, with the intent of helping ensure stable digital broadcasts in areas with poor signal reception as well as providing consumers with an additional viewing option.

Digital terrestrial broadcast IP retransmission is being field tested via NGN as part of a study of the public sector use of digital terrestrial broadcasts carried out by NTT Communications under the auspices of MIC's official research programs for fiscal 2009. IP retransmission involves reception at IP transmission centers of digital terrestrial broadcast signals encoded in MPEG-2, the standard video codec for such broadcasts, followed by conversion in real time to H.264, an advanced video codec featuring superior data compression. These video and data broadcasting signals are then retransmitted via NGN using IP multicast technology for viewing on IP TVs equipped with suitable receivers.
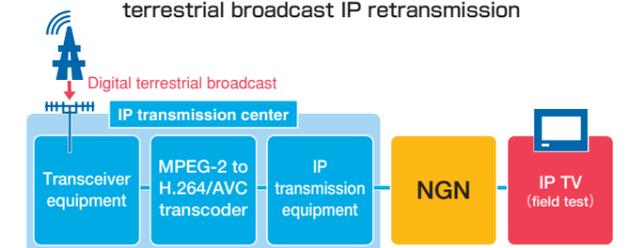
TV programs retransmitted for IP TV will need to be identical to the original terrestrial broadcast in all aspects, including video quality, audio signals, and data content, and this uniformity is currently being verified by the Digital Terrestrial Broadcast Supplemental Retransmission Council.

Digital terrestrial broadcast IP retransmission can be performed over the Internet, but difficulties related to ensuring bandwidth sufficient for high-definition quality broadcasts as well as potential access from outside the broadcast area make

Programs retransmitted for viewing on IP TV are identical to those originally seen on regular digital terrestrial broadcasts.

Configuration for field testing digital terrestrial broadcast IP retransmission

Digital terrestrial broadcast

IP transmission center

Transceiver equipment → MPEG-2 to H.264/AVC transcoder → IP transmission equipment → **NGN** → IP TV (field test)

Field test performed with the cooperation of I-Cast, Inc.

such usage problematic.

NGN's ability to provide solutions to these issues through functionality such as QoS class priority control and IP multicasting targeting specific areas makes it an ideal medium for IP retransmission. Enabling the retransmission of digital terrestrial broadcasts in areas with poor reception should also help to bridge digital divides in Japan.

Employee views

A major challenge

Tatsuo Matsuoka: We worked with broadcasters and TV manufacturers to establish a standard technical format for digital terrestrial broadcast IP retransmission. We had no precedents to refer to, and it was only thanks to NTT's R&D strengths and the cooperation of the NTT business divisions and Group companies involved in implementing NGN that we were able to overcome various issues and make IP retransmission a reality.

Sachiyo Adachi: Since rights holder organizations, broadcasters, TV manufacturers and many others were involved and there was only a limited timeframe, deciding the technical format was a colossal task. We still need to do a lot in terms of aligning policy aspects and generally tidying things up before we can launch actual service.

Tetsuya Yamaguchi: I was in charge of technical issues. We were forced to accommodate any number of difficult requirements from broadcasters regarding provision of the same picture quality as digital terrestrial broadcast and synchronization of display and so forth, but thanks to our technical expertise in video codec and signal transmission technologies, we managed to pull through. Future issues include improving picture quality and reducing costs.

Tatsuo Matsuoka
Senior Manager
Service Strategy,
Corporate Management
Strategy Division,
R & D Produce Group,
Research and
Development Planning
Department, NTT

Sachiyo Adachi
Associate Manager
R & D Produce Group,
Research and
Development Planning
Department, NTT

Tetsuya Yamaguchi
Research Engineer
Promotion Project 1
NTT Cyber Solutions
Laboratories

Telepathology Systems

Telemedicine is a field that requires physicians to accurately analyze a situation in real time. NGN provides essential support for telemedicine and telepathology by enabling the safe and secure transmission of high-definition video images.

Enabling diagnosis during surgery by providing stable transmission of high-definition video images

The term "pathological diagnosis" refers to both gross and microscopic examination of tissues taken from patients for diagnostic purposes. Physicians who specialize in pathological diagnosis are known as pathologists, and are responsible for the final identification of a patient's illness. If pathological diagnosis can be carried out promptly during surgery, it can significantly reduce physical burdens on patients. There is, however, a chronic shortage of pathologists in Japan, where there are fewer than 2,000 of these specialists in practice nationwide. Because of this, patients at many facilities without a resident pathologist are currently forced either to accommodate the schedule of a visiting pathologist or to wait for their specimens to be examined at another facility.

One approach to alleviating this situation is the use of telepathology, which enables pathologists at remote facilities to perform diagnoses via a network. Telepathological diagnosis not only involves the handling of confidential patient information but also depends on the ability to transmit high-quality images with no data loss, which is why NGN's safe, secure, and high-quality communications make it the most suitable network available for the field testing of telepathology systems. The availability of QoS class priority control on NGN ensures the bandwidth necessary for lossless transmission of data as well as remote operation of microscopic equipment with a minimum of lag time, enabling pathologists to perform their duties from a remote facility just as if they were on site. At the same time, NGN's Caller ID functionality provides rock-solid security for the patient's confidential information.

One of the key envisaged applications of telepathology systems is real time diagnosis during surgery. At hospitals with no

NGN provides a stable communications environment.

resident pathologist, patients are often faced with the unpleasant necessity of enduring two surgical procedures — first, a biopsy to obtain tissue specimens, followed at a later date by actual surgical treatment after confirmation of the diagnosis. The presence of a pathologist can obviate the need for a prior biopsy and reduce the physical burden placed on the patient, which is why the use of telepathology for real time diagnosis during surgery is eagerly anticipated at hospitals with no resident pathologist.

Safety and security are essential elements of any medical application, and NGN's capacity to ensure these attributes means that we can expect to see many more remote medical applications such as local community healthcare integration and at-home medical examinations, as well as non-remote medical applications.

Employee views

NGN to play a major role in future medical treatment

Face-to-face communication between patient and physician is an essential element of any medical treatment. Physicians learn about a patient's condition by observing a patient's complexion and demeanor as well as by examining the affected area. This axiom holds true for the provision of remote medical treatment as well, which is why visual communication is so important. That's why I feel that the safe, secure, and high-quality communications available via NGN are so well suited to the development of remote medical applications. The telepathology system we are currently testing has been given high marks for effectiveness and practicality by the staff at Kanto Medical Center NTT EC. The aging of Japan's population is giving rise to a range of pressing problems such as a shortage of doctors and soaring medical costs, and telepathology is an essential part of providing solutions to these issues. What's more, NGN is compatible with many other kinds of medical applications, including at-home medical examinations and integration of electronic medical records. I'm very proud to be able to contribute to the development of remote medical applications through field trials such as this.

Yuichi Fujino
Senior Research Engineer, Supervisor, Producer
Research and Development Planning Department, NTT

Communication between people and their communities

Communication between people and their communities

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.

Moving Toward Ubiquitous Broadband Communications

- Expanding B FLET'S optical fiber access service as well as FOMA third generation（3G）mobile communications services
- Driving NGN development through conducting field trials
- Research and development of infrastructure and services for ubiquitous broadband communications

Initiatives for the creation of an infrastructure for ubiquitous broadband communications
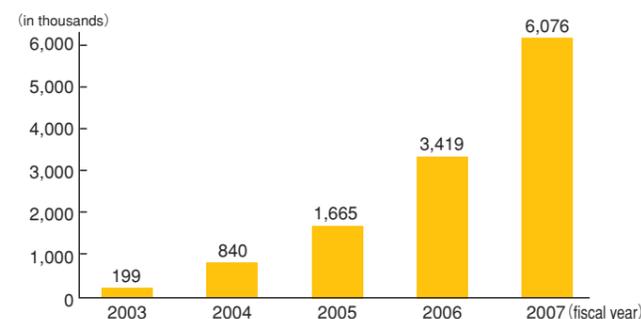
Growth of B FLET'S optical fiber access services

Following up on the e-Japan Strategy that it launched in 2001, Japan's Ministry of Internal Affairs and Communications in 2004 implemented a u-Japan Policy with the goal of promoting ubiquitous broadband communications. Having established a Medium-Term Management Strategy based on these policies, the NTT Group has put maximum priority on the development and deployment of the ubiquitous broadband communications services necessary for fixed-mobile convergence and other goals. As of the end of March 2007, NTT EAST provides B FLET'S optical fiber access service to approximately 3.4 million subscribers and NTT WEST to approximately 2.68 million subscribers, and optical coverage for NTT EAST and NTT WEST communications networks had reached 89% and 87% respectively.

Growth of FOMA 3G mobile communications services

The NTT Group is driving migration to FOMA third generation（3G）mobile communications services in accordance with government initiatives such as the u-Japan Policy. As of the end of March 2007, NTT DoCoMo provides these services to approximately 35.53 million subscribers nationwide. With NTT DoCoMo Kyushu's expansion of service area on March 29, 2007 to the remote islands of Minami Daitoson and Kita Daitoson in Okinawa Prefecture, population coverage for FOMA 3G mobile communications services reached 100%. Future plans aimed at providing added convenience to all aspects of everyday life include the continued enhancement of speed, capacity, and quality of the FOMA network, development of advanced handsets capable of utilizing international services, and expansion of the area covered by FOMA HIGH-SPEED, a high-speed data communications service that uses the High-Speed Downlink Packet Access（HSDPA）protocol.

NGN development

The NTT Group is committed to the creation of ubiquitous broadband networks that will connect people wherever they are and at any time via safe, secure, speedy, and high quality communications services that contribute added convenience to both individuals and the communities they live in as well as provide corporate customers with greater efficiency and new business opportunities. To achieve this goal, NTT is developing a next-generation network（NGN）that combines the stability and reliability of a conventional telephone network with the convenience and economy of an IP network. NTT's NGN was created with an open network interface to actively drive the development of a wide range of services through alliances with third parties in other industries, and field trials to test such possibilities are now underway.

→Please also see "Featured activities from fiscal 2007" on pp.13-20.

Optical fiber access coverage

NTT EAST

Not covered 11%
Covered 89%

NTT WEST

Not covered 13%
Covered 87%

B FLET'S optical fiber access service (NTT EAST/NTT WEST)
Number of subscribers

(in thousands)

	2003	2004	2005	2006	2007 (fiscal year)
	199	840	1,665	3,419	6,076

FOMA third generation (3G) mobile communications services (NTT DoCoMo)
Number of subscribers
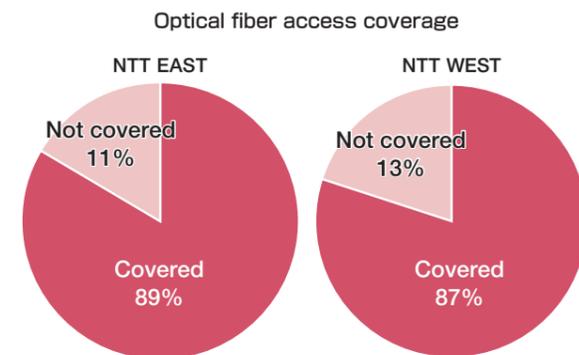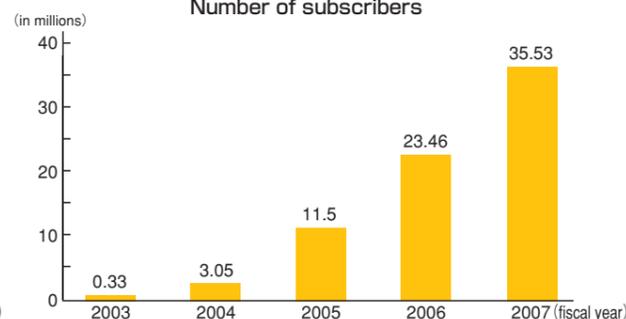
(in millions)

	2003	2004	2005	2006	2007 (fiscal year)
	0.33	3.05	11.5	23.46	35.53

The technology behind ubiquitous broadband communications

Developing technology for the next-generation infrastructure

The NTT Group is promoting group-wide basic research and development of NGN infrastructure using safe and secure full IP-based technology. This new infrastructure is also expected to serve as the mainstay of our efforts to achieve the goals outlined in our Medium-Term Management Strategy. We have successfully developed a number of new communications network technologies for creating future network platforms, including IP network technology that supports backbone networks and optical media technology for developing next-generation optical transmission media.

Topics

Successful development of optical transmission at world record speeds of 14 terabits per second

Anticipating increasing communications traffic, NTT Network Innovation Laboratories recently performed a successful test in which data was transmitted via a single optical fiber at a rate of 14 Tbps over a distance of 160 kilometers. The rapid growth of broadband access has led to a relentless increase in communications traffic, and enhancing capacity while maintaining reliability of the backbone optical network is crucial to ensuring an adequate optical network infrastructure. The NTT experiment broke the five-and-a-half-year-old world record of approximately 10 Tbps for broadband optical fiber transmission. Although continued development is necessary before this technology is rolled out in commercial applications, it will enable the transmission of approximately 140 digital high-definition movies in just one second of time.

High-capacity optical transmission technology delivering 14 Tbps of data over a single optical fiber cable

NTT's latest transmission technology was developed to handle future communications traffic growth. 14 Tbps is equivalent to transmitting 140 digital high-definition movies in a single second.

- Increasing the number of optical wavelengths transmitted by a single optical fiber to 140
  Technology 1: Technology for broadening optical amplifier gain bandwidth increased optical fiber bandwidth 1.7 times
- Increasing the number of signals carried by a single wavelength to 111 Gbps
  Technology 2: Use of a new form of signal modulation developed by NTT
  Technology 3: Development of a high-speed electronic device operating at 111 Gbps
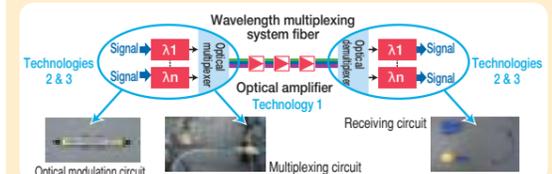
Developing a wide range of applications

The NTT Group continues to research and develop basic technology for a wide range of high quality and high security applications for ubiquitous broadband services.

We are focusing in particular on developing content application technology that will serve as a foundation for high-definition video distribution services and the distribution of content such as broadcasting, advertisements, music, and games. We are also developing data distribution platform technology necessary for digital rights management, payments, content distribution, and other common functionality required by content distribution businesses and e-commerce.

Topics

Research and development on NGN-based high-definition video distribution systems

NTT Cyber Solutions Laboratories is currently conducting research and development on platform technology for NGN-based high-definition video distribution services that will enable the provision of a wide range of applied services utilizing metadata, unicast video-on-demand（VOD）content, and multicast IP broadcasting. Effective transmission of high-definition video has already been achieved utilizing the H.264 video codec. During NGN field trials performed in fiscal 2007, services such as VOD viewing of missed television episodes, automatic insertion of commercial messages customized to viewer's preferences, and digital terrestrial broadcast IP retransmission were provided.

High-definition video distribution system
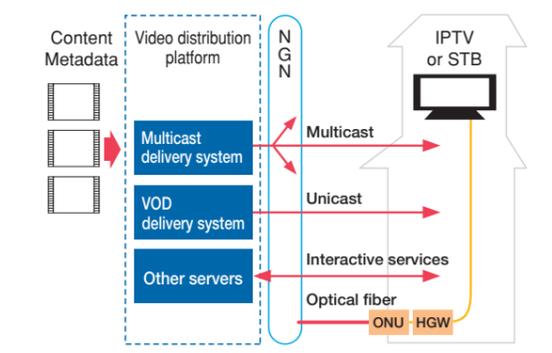
Initiatives for a Shrinking and Aging Society

· Developing solutions for monitoring and providing healthcare to the elderly
· Developing solutions for providing remote medical examinations and healthcare services
· Providing support for education utilizing ICT

Developing support structures for enabling the elderly to live free of anxiety

As its population continues to shrink and age, Japan needs to address a range of pressing social issues, including safety and security in daily life, environmental and energy issues, and revitalization of the economy. However, perhaps the most crucial issue is coping with the increasingly aged population. With the shift toward nuclear families, more and more elderly live either on their own or together with other elderly people. The NTT Group is endeavoring to develop ICT-based support structures that will help to relieve anxiety and loneliness among these elderly people.

One solution is monitoring services that alert family or local authorities and such like to changes in the well-being of elderly who live on their own or with other elderly people. Such monitoring services use ICT to transmit data from a sensing system without putting any burden or stress on the individual being monitored.

Another area is the provision of emotional support by helping to relieve the loneliness of those who live on their own or link them with other family members. One such solution is a communication service in which volunteers and professional caregivers use ICT to connect with and listen to the cares and concerns of elderly people living on their own.

Yet another solution provides preventive health care support to help maintain the health of elderly people who do not require care directly. ICT is used to connect elderly in their homes with a professional caregiver or rehabilitation center. This system enables participating members to communicate among themselves and to receive instruction on exercises that help to maintain sense of balance and avoid injurious slips and falls.
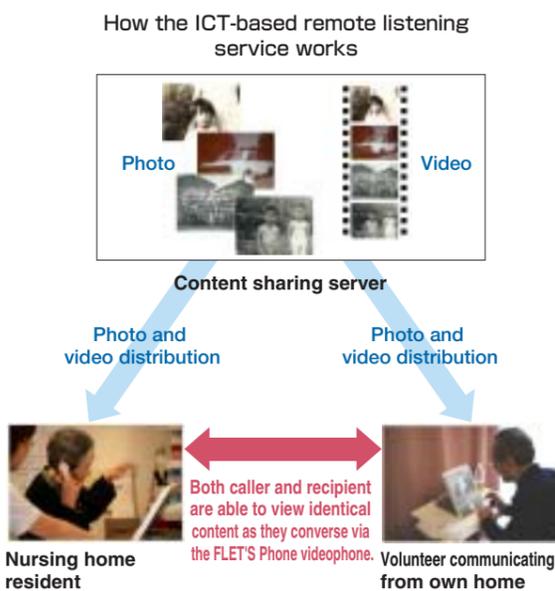
During fiscal 2007, NTT laboratory groups pressed ahead with R&D in these areas, and NTT Group companies carried out field tests of various solutions. One of our achievements in this field is the adoption in fiscal 2006 of our elderly monitoring system by the city of Kobe, where many elderly people left homeless by the Hanshin Awaji Earthquake are still living alone in temporary housing. In fiscal 2007 this system was used to augment existing manpower-based and other services for monitoring elderly people.

Topics

Field testing of a remote listening service using ICT
From April 18 to May 31, 2006, in cooperation with BestLife Inc. and two other companies, the NTT Group field tested a remote listening service for providing company to elderly people living on their own. For the trial, this remote listening service was used to connect elderly residents of nursing homes to volunteers communicating from their homes via broadband videophone. This system is expected to enable volunteers to provide company to a greater number of elderly people over a larger area. NTT's FLET'S Phone videophone enables volunteers to view not just the faces of the elderly people they chat with, but also their favorite photos, videos, and other content, stimulating closer, more personal conversation.

During the trial, the response of recipients was evaluated by a physiotherapist for both verbal responses and facial expressions, and volunteers provided their impressions through a questionnaire survey on the system and its ease of operation. This data will be used to verify the benefits and feasibility of such remote listening systems from a business standpoint.

How the ICT-based remote listening service works

Photo   Video

Content sharing server

Photo and video distribution   Photo and video distribution

Both caller and recipient are able to view identical content as they converse via the FLET'S Phone videophone.

Nursing home resident   Volunteer communicating from own home

Providing remote medical services

The NTT Group is constantly seeking to utilize ICT to support the provision of reliable healthcare services irrespective of location. To such ends, we are developing information and communications systems to provide remote healthcare services via NGN that connect patients in their homes with doctors in medical facilities to conduct health checkups or video-based medical examinations. We are also working to develop an information and communications platform for supporting remote diagnosis and efficient collaboration between medical facilities via network connections linking general hospitals with local clinics, thereby making advanced medical expertise available to patients in areas with a shortage of medical facilities.

NTT Service Integration Laboratories conducted field tests on these systems during fiscal 2007 as part of NTT initiatives to promote their deployment and use by local authorities, university hospitals and other medical facilities throughout Japan.

Topics

Support for remote diagnosis using mobile videophone capability
In an example of successful partnership between private industry and academia in the healthcare field, NTT DoCoMo Hokuriku conducted joint research with Eizo Nanao Corporation and the Kanazawa University Graduate School of Medical Science to develop a new, easy-to-operate system for transmitting graphic and video images taken with X-ray, CT, and MRI devices to the mobile videophones of specialists at other medical facilities. Neurosurgeons at Kanazawa University participating in this research reported that they were able to arrive at initial diagnoses for about half of all cases by following instructions provided by specialists who examined images sent to their mobile phones. They described the system as being extremely effective and more than sufficient for making initial diagnoses and deciding initial treatment in the field of neurosurgery, and as a result, it went into full operation in November 2006.
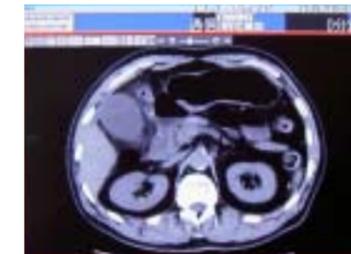
Medical image viewer

Viewing CT scans transmitted via FOMA

Support for education in underpopulated areas

Japan's Ministry of Education, Culture, Sports, Science and Technology（MEXT）is promoting the development of a wide variety of support programs intended to meet the needs of contemporary education in areas suffering from depopulation and declining birthrates. The NTT Group has responded by creating a platform design to overcome disadvantages faced by students and teachers in such areas by using teleconferencing, video-equipped mobile terminals, and other ICT to enable distance learning and social interaction with other schools. During field testing in fiscal 2007, NTT Group companies cooperated with local authorities in introducing these programs as well as providing Internet access for elementary school classes in a number of municipalities.

Topics

Experiment in joint classes between two schools
On January 25, 2007, an experiment using a new system for video-based joint classes via mobile network was conducted between elementary schools in Kyushu under the auspices of a MEXT program to develop new education systems. A number of NTT Group companies took part in the experiment, which was run by NTT LEARNING SYSTEMS.

The use of mobile networks enables teleconferencing even in areas without fixed-line broadband access.

System for holding joint classes

Elementary School B on an island off the coast of Kyushu   FOMA network   ISDN network   Elementary School A in mainland Kyushu

Communication between people and their communities
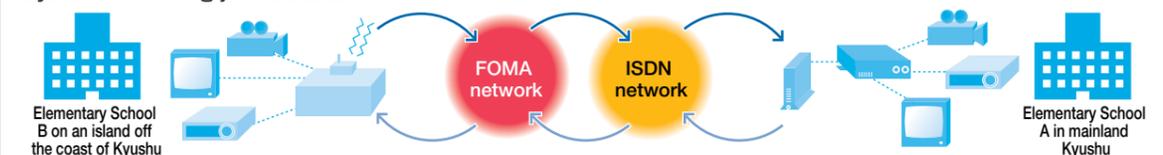
Providing Increased Opportunities to Participate in the Community

・Supporting differently abled people with ICT
・Promoting teleworking through ICT

Helping people with different abilities to lead anxiety-free lives

NTT laboratory groups and Group companies are putting ICT to work in creating barrier-free environments through conducting R&D on support systems for both personal communication and information sharing, and operating a portal site containing valuable information for elderly and differently abled people. NTT DoCoMo continued in fiscal 2007 to participate in the IT Barrier-Free Project for Disabled Persons and Other Users consortium organized by the New Energy and Industrial Technology Development Organization（NEDO）for drafting design guidelines for mobile support systems to be used by differently abled people.

Topics

Providing content for differently abled people

In April 2005, NTT CLARUTY opened the Yu Yu Yu portal site to provide useful information for elderly and differently abled people. The site attracted more than 280,000 page views in fiscal 2007. NTT DoCoMo Hokkaido, NTT DoCoMo Kansai, and NTT DoCoMo Kyushu also operate Internet and mobile sites on local barrier-free facilities and services that were accessed 126,878 times last year.

Universal Net Community Yu Yu Yu
http://www.u-x3.jp/ (in Japanese only)

Kuruma-Isu Odekake Net (PC version)
http://kurumaisu.ct.docomo-kansai.co.jp/ (in Japanese only)

Increasing employment opportunities and reducing disparities in the employment market

The NTT Group is actively promoting distribution of employment information as well as contributing to the creation of teleworking and other new forms of employment that utilize ICT as solutions to an increasingly volatile employment market and the need to develop employment opportunities for elderly and differently abled people. For example NTT Communications and NTT Com CHEO decided in March 2007 to hire more CAVA (.com Advisor and Valuable Agent) staff for providing customer support for Internet access and so forth from their homes. The companies are focusing in particular on offering training to members of the postwar baby boom generation and hiring those who pass the qualifying exam.

Topics

Digital Map Virtual Factory

NTT NEOMEIT's Digital Map Virtual Factory is an organization that provides employment opportunities to differently abled people, single mothers raising small children and others who find commuting difficult by hiring them to work from home at online creation and editing of digital map data. In March 2007, the Digital Map Virtual Factory added Ishikawa Prefecture to its existing areas of activity covering Kumamoto, Hyogo, Mie, Shizuoka, Hiroshima, Ehime, and Fukui Prefectures.

System enabling working from home

Communication between people and the global environment

Communication between people and the global environment

We shall strive both to reduce our own environmental impacts and build environment-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.

Basic Policies and Implementation Structure

・Group-wide implementation of environmental protection activities based on the NTT Group Global Environmental Charter
・Reducing the environmental impacts of society as a whole by providing ICT services based on the NTT Group's Vision for Environmental Contribution

NTT Group Global Environmental Charter

The NTT Group in 1999 enacted the NTT Group Ecology Program 21, a framework for contributing to the creation of a sustainable society.
Based on this program, we established the NTT Group Global Environmental Charter that set forth our company's basic principle and policies related to environmental protection.
Based on the fundamental principle that group business oper-

ations need to be reconciled with environmental protection, the NTT Group Global Environmental Charter emphasizes the importance of preventing global warming and reducing waste products and paper consumption, and establishes a set of NTT Group Principal Activity Plan Targets to be achieved by fiscal 2011. These targets are currently guiding group activities.

NTT Group Global Environmental Charter

【Basic principle】
To ensure the harmonious co-existence of people with nature and to achieve sustainable growth, we will do our utmost to protect the global environment in all our corporate activities.

【Basic policies】
❶ Compliance with laws and regulations and fulfillment of social responsibilities
To observe all laws and regulations regarding environmental protection issues and to carry out our responsibilities as global corporate citizens
❷ Reducing environmental loads
To establish action plans for energy conservation (reduction of greenhouse gas emissions), resource conservation (conservation of materials such as paper), and waste reduction, and to strive to make continuous improvements
❸ Establishing and maintaining environmental management systems
To establish an environmental management system enabling each busi-

ness unit to pursue voluntary environmental protection activities
❹ Developing environmental technologies
To contribute to the reduction of environmental load through various areas of R&D, including multimedia services
❺ Social contribution efforts
To promote daily environmental protection efforts in coordination with citizens and government agencies
❻ Disclosure of environmental information
To enhance both internal and external communications through the disclosure of environmental information

The NTT Group's Vision for Environmental Contribution

In May 2006, the NTT Group announced its Vision for Environmental Contribution. This vision clarifies our basic concept for providing ICT services that will enable our customers as well as society as a whole to reduce environmental

impacts. The vision also defines our CO_2 reduction target for fiscal 2011 and the activities we intend to undertake to achieve this target.

NTT Group Vision for Environmental Contribution
The NTT Group is helping to reduce the environmental impacts of its customers and society as a whole by developing and disseminating ubiquitous broadband-based ICT services that promote positive changes in lifestyles and business models.

Reduction target for fiscal 2011

Reductions in CO_2 emissions as a result of ICT services	−	CO_2 emissions from providing ICT services	=	10 million ton reduction in CO_2 emissions

Activities for achieving our targets for fiscal 2011
❶ Increase subscriber base for optical fiber services that enable lower impact lifestyles and business models.
❷ Expand ubiquitous broadband services.
❸ Reduce the environmental impacts of our business activities.
❹ Reduce the electrical power required by customers' communications equipment.

Green guidelines

NTT Group operations have the following three key attributes: (1) procurement of a great many products; (2) in-house R&D facilities; (3) possession of many buildings. To promote the effective reduction of our environmental impacts, we have drafted green guidelines that address each of these three key attributes.

1. Guidelines for Green Procurement
To ensure that both we and our suppliers contribute to environmental conservation on a continuing basis, Guidelines for Green Procurement call for such measures as minimizing the use of hazardous substances and using materials suitable for recycling, and also stipulate criteria for evaluating the environmental practices of suppliers.
2. Green R&D Guidelines
Green R&D Guidelines stipulate criteria for evaluating the effectiveness of methods, processes, and results of our R&D activities in reducing environmental impacts.
3. Green Design Guidelines for Buildings
Green Design Guidelines for Buildings stipulate criteria for evaluating seven categories in the area of construction and maintenance of buildings, including extension of operating life, with the aim of reducing building-related environmental impacts.

The three types of NTT Group green guidelines

Organization for promoting environmental protection

In 2005, the NTT Group established a CSR Committee charged with overseeing Group CSR activities. Under this committee, the NTT Group Global Environmental Protection Promotion Committee was established as a decision-making body for group environmental protection activities that works in close cooperation with the NTT Environmental Protection Office and departments in charge of environmental issues in individual group companies.

The Global Environmental Protection Promotion Committee oversees several other committees, including the Greenhouse Gases Reduction Committee, Waste Disposal and Recycling Committee, and the Environment and ICT Committee together with their subordinate working groups and group-wide environmental projects. The committee is also responsible for establishing basic policies, managing objectives, and resolving issues.

The NTT Group organization for promoting environmental protection (as of July 2007)
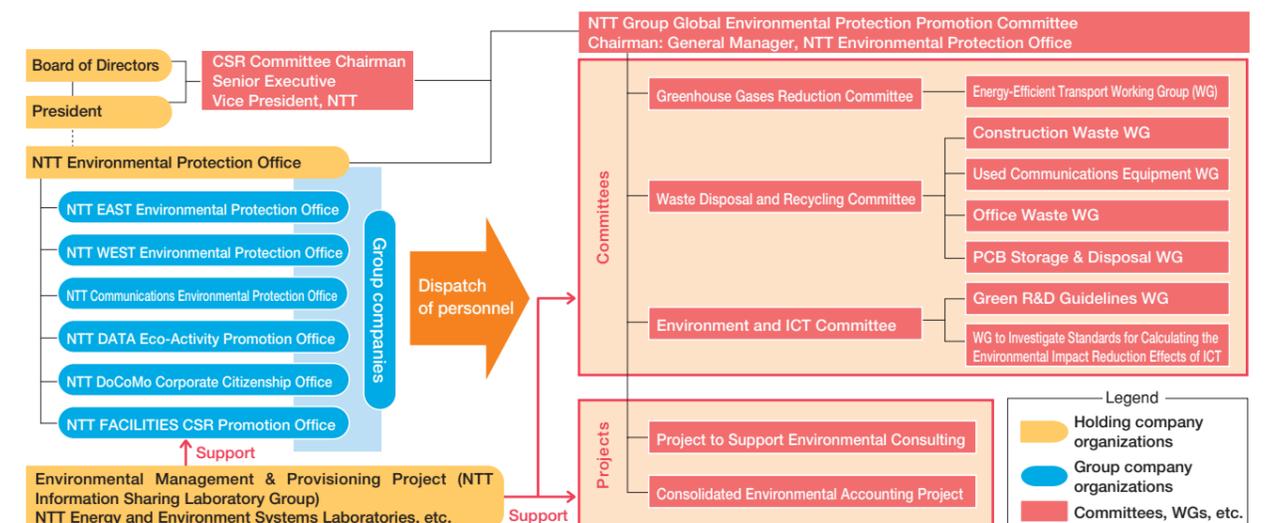
Environmental Goals and Activities: Results and Assessment

· Striving to achieve NTT Group Principal Activity Plan Targets through actions aimed at preventing global warming and reducing waste and consumption of paper
· Refining environmental accounting practices to enable more efficient and effective environmental management

Progress made on the NTT Group Principal Activity Plan Targets (by fiscal 2011)

	Prevention of global warming	Waste reduction	Reduction in paper use
Goals	● Reduce CO_2 emissions per subscriber by at least 35% based on fiscal 1991 levels for all telecommunications carriers. (Telecommunications carriers: NTT EAST, NTT WEST, NTT Communications, NTT DoCoMo) ● Reduce CO_2 emissions per unit of sales by at least 25% based on fiscal 1991 levels for all other group companies. (Other group companies: NTT DATA, NTT COMWARE, NTT FACLITIES, etc.)	● Reduce amount of final disposal waste to no more than 15% of fiscal 1991 levels.	● Reduce consumption of virgin pulp to no more than 80% of fiscal 1991 levels.
Specific activities	● Reduce electricity consumption through the Total Power Revolution (TPR) campaign (see p. 34). ● Reduce CO_2 emissions in logistical and sales operations (see p. 34).	● Reduce the amount of final disposal waste through reduce, reuse, and recycling efforts (see p. 36).	● Reduce paper use by recycling telephone directories (see p. 37). ● Reduce paper use through Internet billing statement services (see p. 37).

Results (in graphs)

CO_2 emissions reduction rates of NTT telecommunications carriers declined.
Power consumption rose due to increased deployment of IP related equipment and base stations for third generation mobile technology, resulting in a decline in CO_2 emissions reduction rates compared with the previous year.

CO_2 emissions reduction rates of other group companies declined.
Power consumption rose due to increased deployment of data centers and other equipment, resulting in a decline in CO_2 emissions reduction rates compared with the previous year.

Amount of final disposal waste* declined and reduction target was cleared.
Waste output increased slightly due to additional installations of IP equipment and base stations for third generation mobile technology, but at 32,000 tons the amount of final disposal waste cleared our reduction target.

Consumption of virgin pulp for telephone directories declined and overall reduction target was cleared.
For fiscal 2007, the inclusion of billing statements as an item of virgin pulp consumption caused a slight increase over the previous year to 29,000 tons. Consumption of virgin pulp for telephone directories fell to 23,000 tons, and overall target for the year was cleared.

CO₂ emissions reduction rates of telecommunications carriers (base year: fiscal 1991)

CO₂ emissions reduction rates of other group companies (base year: fiscal 1991)

CO₂ emissions from business operations

Waste output and final disposal waste

Virgin pulp consumption

- Coefficients used for calculating CO_2 emissions based on levels of power consumed were 0.378 kg/kWh for fiscal 2003 - 2005 and 0.555 kg/kWh for fiscal 2006. For fiscal 2007, the coefficients of respective power suppliers were used.

*Waste disposed of in landfills

- In fiscal 2007 billing statements were also included in assessments of virgin pulp consumption.

Environmental accounting

The NTT Group introduced environmental accounting in fiscal 2001 to boost the efficiency and effectiveness of its environmental conservation efforts by quantitatively determining both the cost of environmental conservation programs undertaken as part of its business activities and the returns gained. In fiscal 2007, as a result of making further recycling efforts and switching to intermediate processors offering superior cost performance, we were able to boost the amount of recycled waste materials by nearly 20,000 tons in addition to saving nearly 790 million yen in resource recycling costs compared with fiscal 2006. We are determined to further improve our environmental management through quantitative measurement and analysis of our environmental activities.

1. Scope of data
The companies subject to consolidated environment accounting are NTT, NTT EAST, NTT WEST, NTT Communications, NTT DATA, NTT DoCoMo, and their group companies (159 companies in total).

2. Applicable period
Data for fiscal 2007 report is from April 1, 2006 to March 31, 2007
Data for fiscal 2006 report is from April 1, 2005 to March 31, 2006

3. Accounting method
● Accounting is based on the NTT Group Environmental Accounting Guidelines. These guidelines comply fully with the Environmental Accounting Guidelines 2005 issued by the Ministry of the Environment.
● Environmental conservation costs are expressed in monetary units and conservation benefits in monetary units or physical quantity.
● Environmental conservation costs are tabulated separately as environmental investments and environmental costs. From fiscal 2004, depreciation costs are included in environmental costs. Personnel costs are also included in environmental costs.
● Figures for environmental investments and costs for fiscal 2006 were partially revised as a result of reexamination of available data.
● Reductions in CO_2 emissions through energy conservation measures are calculated by subtracting actual emissions from estimated emissions in the event that no such measures were taken.

MOE Guidelines categories	Environmental investments (in millions of yen)		Environmental expenses (in millions of yen)		Economic benefits (in millions of yen)			Quantitative benefits (in thousands of tons)		
	FY 2007	FY 2006	FY 2007	FY 2006		FY 2007	FY 2006		FY 2007	FY 2006
(1) Business area costs	5,290	4,680	24,780	25,470						
・Pollution prevention costs	120	230	1,410	820						
・Global environmental conservation costs	4,660	3,790	9,530	10,020	Cost reductions through energy conservation	4,250	5,280	Reductions in CO₂ emissions through energy conservation measures	51	94
					Revenues from sale of recyclable waste	7,260	3,780	Recycled used communications equipment	232	217
					Cost reductions by reusing dismantled communications equipment	21,680	35,630	Recycled construction waste	216	262
・Resource recycling costs	500	660	13,840	14,630	Cost reductions by reusing office waste materials	40	10	Recycled civil engineering works waste	141	96
								Recycled office waste	29	25
								Other recycled items	17	15
(2) Upstream/ downstream costs	10	10	4,810	4,330	Revenues from sale of recyclable waste	450	150	Number of communications devices collected from customers (in thousands)	9,420	10,190
					Cost reductions in postal expenses through computerization	3,010	1,710			
(3) Administrative costs	20	30	4,980	5,530						
(4) R&D costs	11,930	4,220	14,810	14,900						
(5) Social contribution activity costs	0	0	140	100						
(6) Environmental remediation costs	0	0	300	60						
Total	17,250	8,940	49,820	50,390		36,690	46,560			

Overview of the NTT Group's Environmental Impacts

- Quantitatively tracking the environmental impacts of business activities at regular intervals
- NTT Group business activities resulted in 3.776 million tons of CO_2 emissions, and 32,000 tons of final disposal waste in fiscal 2007

The NTT Group quantitatively tracks the environmental impacts of its various business activities at regular intervals, and is striving to reduce its impact on the environment by establishing concrete numerical targets for preventing global warming, and reducing waste and consumption of paper based on the NTT Group Principal Activity Plan Targets.

Of the 3.776 million tons of CO_2 emissions generated by the NTT Group in fiscal 2007, 3.7 million tons (approximately 98%) was derived from business operation-related electricity consumption. Of the 679,000 tons of waste generated, 635,000 tons (approximately 94%) was recycled, and the remainder was incinerated, resulting in a reduction of 11,000 tons to leave 32,000 tons of final disposal waste.

Each year, the NTT Group issues approximately 119.51 million telephone directories throughout Japan, which translates into 73,000 tons of paper, or approximately 0.2% of the total amount of paper used in Japan. Of those 73,000 tons, 23,000 tons are from virgin pulp.

1. Research and development by NTT Laboratories
2. Products satisfying the rigorous environmental criteria stipulated by NTT EAST and NTT WEST

Virgin pulp consumption 29,000 tons

Electric power consumption 8.51 billion kWh

Fuel consumption 47,000 kl

Gas consumption 74.64 million m^3

Water consumption (total tap & wastewater) 14.52 million m^3

INPUT

Suppliers

Manufacturers

NTT Group businesses

Customers

Businesses

R&D
CO_2 emissions due to R&D[1]
72,000 t-CO_2

Procurement

Logistics
CO_2 emissions due to internal logistics
4,000 t-CO_2

Construction

Operations
CO_2 emissions due to electric power consumption, etc.
3.7 million t-CO_2

Providing products and services
Dynamic Eco-mark products[2]
196 items

Length of reused cables
1,464 km

Reused PCs

Paper manufacturers

Paper used for printing telephone directories
73,000 tons

New telephone directory delivery
119.51 million copies

Closed-loop recycling of telephone directories

Recycled paper content
69.1%

Amount of old telephone directories collected
38,000 tons

Recycling
Recycling rate for mobile phones
100%

Collection of used products
Communications devices collected from customers
9.42 million units

Individuals

OUTPUT

Waste

Amount of waste recycled
635,000 tons

Recycled used communications equipment	232,000 tons
Recycled construction waste	216,000 tons
Recycled civil engineering works waste	141,000 tons
Recycled office waste	29,000 tons
Others	17,000 tons

Amount of final disposal waste
32,000 tons

Amount of waste reduced by incineration
11,000 tons

OUTPUT

CO_2 emissions
3.776 million t-CO_2

Initiatives to Prevent Global Warming

・Reducing CO₂ emissions through TPR campaign that cut electricity consumption by 124 million kWh
・Reducing the environmental impact of society as a whole by developing and deploying ICT services

Initiatives to reduce power consumption

Over 90% of the NTT Group's CO2 emissions are attributable to electrical power consumption, a situation that prompted the NTT Group to launch its Total Power Revolution（TPR）campaign and work as one to reduce power usage.
Through its TPR campaign, the NTT Group had been promoting energy management schemes for the 4,000 buildings that it occupies throughout Japan. In addition to deploying energy efficient electrical devices and air conditioning equipment and switching to the use of energy-saving DC power supply for broadband equipment such as servers and routers, the TPR campaign also calls for the use of clean energy systems such

as solar and wind power. Furthermore, many NTT Group companies have registered with the Ministry of Environment's Team Minus 6% project, and have initiated "CoolBiz" and "WarmBiz" dress codes. These various initiatives succeeded in saving 124 million kWh of electricity throughout the entire NTT Group in fiscal 2007.

Initiatives to reduce environmental impacts in logistical and sales operations

Compliance with the Revised Energy Conservation Law

The Revised Energy Conservation Law that came into effect on April 1, 2006 requires the implementation of energy conservation initiatives also by third party cargo contractors hired to handle shipping and logistical operations.
Each NTT Group company also calculates and evaluates approximate shipping volumes based on our newly established NTT Group Shipping Volume Calculation Manual.
NTT LOGISCO is in charge of comprehensively managing and controlling logistics throughout the entire NTT Group, and has been devising further efficiencies through arranging joint transport and deliveries, and promoting modal shifts in our logistical operations. In fiscal 2007, NTT Group shipped 5,830 tons of goods using transportation modes with low CO2 emissions like rail and ferry services.

Using low-emission vehicles

When renewing the lease on a company vehicle, each NTT Group company has been switching to low-emission cars to cut down on CO2 emissions. At the end of fiscal 2007, the entire NTT Group had a total of 603 low-emission vehicles, which included 387 hybrid cars and 216 cars that run on natural gas. We also made efforts to reduce fuel consumption and cut down on CO2 emissions by avoiding unnecessary idling and checking tire pressure.

Environmental solutions and efforts to reduce the environmental impact of NTT group products and services

The NTT Group is engaged in efforts to reduce the environmental impact of its products and services in order to prevent global warming.
NTT DoCoMo has been working to develop more energy-efficient mobile phones, while NTT FACILITIES has also endeavored to reduce environmental impacts across a range of fields. For example, it provides stand-alone solar LED lighting systems with zero CO2 emissions, and low-energy air conditioning solutions. It also participated in a "mega-solar" project launched in Saku City, Nagano Prefecture, in September 2006 that provided an opportunity to use its experience in developing environmental technologies in a clean energy project.

NTT DATA too has contributed by providing a service for supporting the calculation of CO2 emissions at business premises and drafting reports that comply with the newly Revised Energy Conservation Law and the Law Concerning the Promotion of the Measures to Cope with Global Warming.

Urban heat island mitigation

With the aim of protecting the natural environment, the NTT Group is actively pursuing efforts to install rooftop gardens and wallside greenery systems on company buildings in an effort to reduce urban heat island（UHI）effects that are generated in cities.
NTT Advanced Technology is also promoting heat-blocking paint applications to mitigate UHI effects.

Topics

Countering UHIs with sweet potatoes
In a joint UHI research initiative, in May 2006 NTT FACILITIES and NTT Urban Development installed an aerohydroponic cultivation system to grow sweet potatoes on the rooftop of the Urban Net Mita Building, located in an area of Tokyo designated for heat island mitigation measures. The experiment showed that the exceptional heat-blocking performance of the sweet potato plants reduced the surface temperature of the roof by up to 27℃ and that nearly 80% of the net solar energy reaching the sweet potato plants was being dissipated through transpiration from the surface of the leaves.

Comparative study of UHI mitigation by rooftop greenery
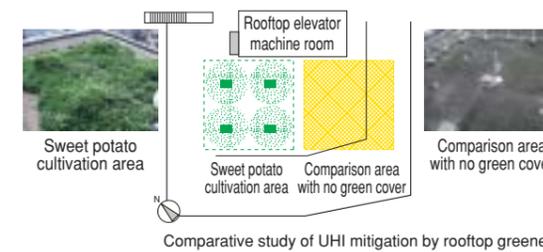
Daily change of surface temperatures on the rooftop
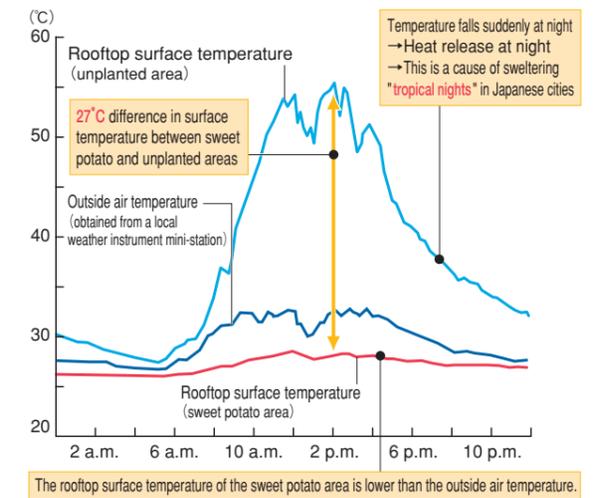
Efforts to reduce environmental impact by offering ICT services

The spread of ICT devices does of course increase electricity consumption, but providing ICT services can drive the more efficient usage of energy and resources and reduce the CO2 emissions of society as a whole by boosting the efficiency of production processes, reducing the use of transportation and delivery of goods, and reducing the production of physical media such as books, CDs, and DVDs by enabling the download or streaming of content. Calculations performed by NTT indicate that the use of ICT services in Japan during fiscal 2007 saved energy equivalent to 1.9% of the country's energy consumption.
With the enactment of the NTT Group's Vision for Environmental Contribution in fiscal 2007, we declared our commitment to protecting the global environment by further expanding our business operations to provide ICT services.
As an environmental management system initiative, NTT Laboratories evaluates the environmental impact reduction effects of leading R&D achievements that have been adopted by Group companies, and this information can be used as a tool to support sales activities. For example, an e-government system developed by NTT Service Integration Laboratories that enables the online execution of various local authority-related procedures by members of the public was found to have clear environmental merits, cutting related CO2 emissions by 68% through reducing travel to local authority offices and consumption of paper application forms.

Energy saved and consumed through ICT
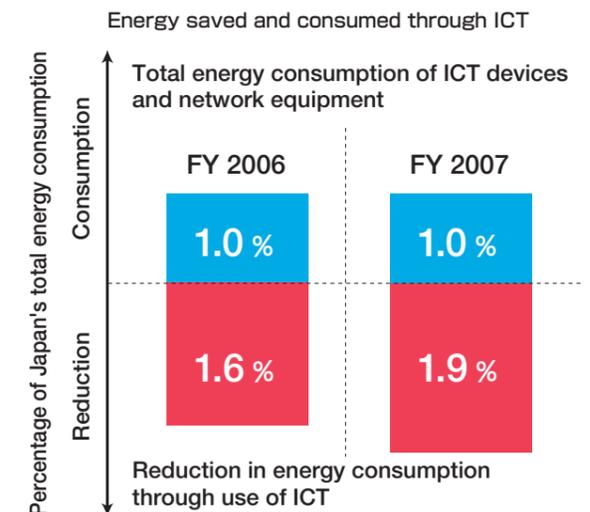
- A portion of FY 2006 data was revised due to changes in government-supplied data regarding e-commerce.

Efforts to Reduce Waste

・Final disposal waste reduced to 32,000 tons through strenuous efforts to curb waste output, surpassing our fiscal 2011 target of 72,000 tons for the second consecutive year
・Zero emissions achieved for the third consecutive year with communications equipment recycle rate of 99.7%

Reduction of final disposal waste

Having committed itself to reducing the amount of its final disposal waste to 15% or less of fiscal 1991 levels by fiscal 2011, the NTT Group is now implementing 3R（reduce, reuse, and recycle）programs in the areas of used communications equipment, construction waste, civil engineering waste, and office waste.

These programs have resulted in the reduction of final disposal waste to 32,000 tons for fiscal 2007, surpassing our fiscal 2011 target of 72,000 tons well ahead of schedule.

Efforts to reuse and recycle communications equipment

The NTT Group owns a variety of communications equipment used to provide communications services, such as telephone poles, switching equipment, and communications cables. Naturally, such equipment needs to be removed and disposed off when it reaches the end of its service life or is replaced during system upgrades. Of the 200,000 tons or more of communications equipment that is taken out of service each year, the NTT Group attempts to reuse as much as possible for various internal needs, and makes every effort to recycle any equipment that is left over.

For fiscal 2007, across the entire NTT Group, we recycled 166,000 tons of concrete telephone poles, 14,000 tons of switching equipment, and 25,000 tons of communications cables. These activities resulted in a recycle rate of 99.7% for all of our communications equipment, achieving zero emissions for the third consecutive year.

Amount and percentage of used communications equipment recycled
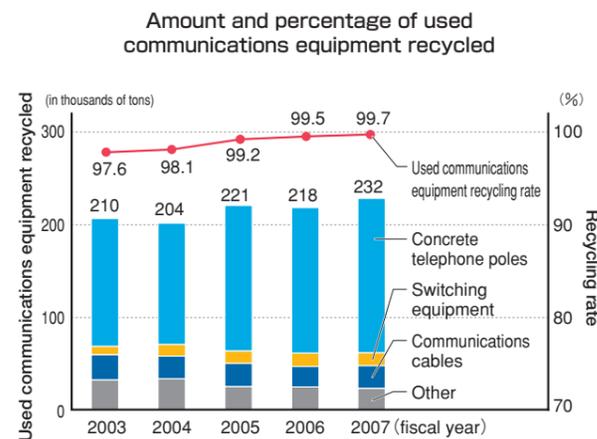
Efforts at product recycling

The NTT Group actively collects and recycles phones, faxes, and other consumer communications equipment no longer needed by our customers. NTT EAST and NTT WEST both have programs to recover and recycle phone, fax and other equipment, small rechargeable batteries such as nickel-cadmium and lithium-ion batteries, and toner cartridges from plain paper fax machines. Furthermore, NTT DoCoMo recycles 100% of the mobile phones, batteries and battery chargers, and other accessories collected at DoCoMo Shops throughout the country. NTT DoCoMo also works with NTT LOGISCO to place used mobile phone collection boxes at electronics retail outlets and convenience stores. In fiscal 2007, NTT Group companies collected a total of 3.59 million mobile phones, 3.92 million batteries, and 1.91 million battery chargers.

Number of used communications equipment and batteries collected
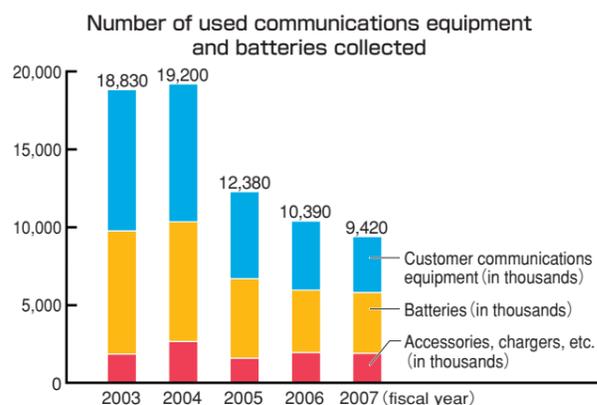
Terminology Zero emissions: A concept proposed by the United Nations University whereby all waste and by-products generated by industry are used as resources for other industry in an effort to eliminate waste entirely.

Efforts to Reduce Consumption of Paper Resources

・Virgin pulp consumption cut to 29,000 tons through closed loop telephone directory recycling, electronic payment, and Internet billing statement services

As a major consumer of paper resources for telephone directories and other publications, the NTT Group endeavors to reduce its paper usage through the closed loop recycling of old telephone directories into paper for new directories, double-sided printing of internal documents, promotion of paperless electronic payment, and various other measures.

We maintained our efforts to curb virgin pulp consumption in fiscal 2007 by raising the percentage of recycled paper used in NTT telephone directories to 69.1%.

We also reduce paper consumption by offering customers who pay their bills via automatic bank transfer or similar services the choice of using online billing statement services that enable them to view details of their bills via the Internet, e-mail, or mobile handsets any time of the day. In fiscal 2007, registrations for these services rose to 3.985 million, which translates into an annual saving of about 805.2 tons of paper resources, equivalent to 201.27 million sheets of A4 size paper.

NTT LOGISCO too operates a convenient and secure confidential document collection and recycling service（SS-BOX）that collects huge volumes of old and unneeded confidential documents from various corporations which are recycled into protective packaging material or copier paper.

Paper consumption and recycled-paper content of telephone directories

Paper resource reductions and registrations for NTT Internet billing statement services
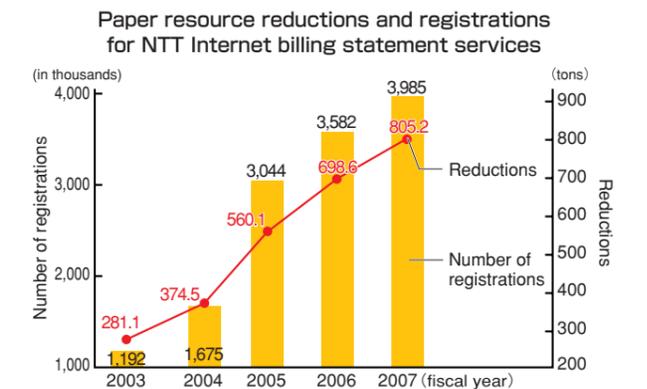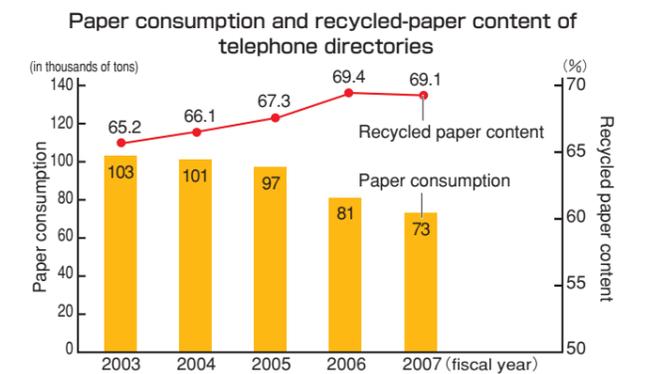
Environmental Risk Management Initiatives

・Appropriate implementation of regular soil and water surveys, chemical management, and removal and storage of items using PCBs (polychlorinated biphenyl) according to established guidelines and checklists

As a responsible corporate citizen, the NTT Group undertakes various measures to minimize any potential threat to society posed by risks such as environmental accidents and pollution. Activities performed periodically and systematically according to established guidelines and checklists as a part of this commitment include soil and water surveys, chemical management, and removal and storage of items using PCBs.

The NTT Science and Core Technology Laboratory Group appropriately manages and disposes of chemical substances used in various R&D initiatives according to the three best practices of (1) preferential use of chemicals with minimum impact on the environment, (2) use only of necessary chemicals, and (3) use of no more than minimum required amounts.

The NTT Group has also been promoting the removal of asbestos - especially sprayed asbestos - at NTT facilities since 1985 in response to growing social concern about asbestos-related health issues. Following the enactment in 2005 of the Ordinance on Prevention of Hazards Due to Asbestos, we carried out a new survey in fiscal 2007 that revealed the existence of materials containing asbestos in some NTT facilities, and took appropriate measures as stipulated by law.

The NTT Group will continue in its efforts to prevent environmental accidents and pollution through practicing effective environmental risk management.

Environmental Technology Development

> · Conducting basic research and development in energy conservation, clean energy, hazardous substance detection and detoxification, and other fields

Based on the NTT Group Global Environmental Charter, we have been contributing to the creation of a sustainable society through environmental technology R&D, with NTT Laboratories conducting basic research and development in various fields including energy conservation, clean energy, and detection and detoxification of hazardous substances.

Topics

Ultra low-voltage input booster technology

At NTT Energy and Environment Systems Laboratories, we have been researching and developing ultra low-voltage input booster technology which can play a significant role in boosting the performance of photovoltaic panels, a source of clean energy. In conventional photovoltaic panels connected using DC electricity, the entire panel loses the ability to generate power efficiently if only one cell in the panel became cracked or covered by shade.

The new technology enables an ultra-low 0.3 volt current produced by sunlight in a panel to be boosted to 5 volts, the voltage required to run devices, and also stabilizes output while boosting it. This technology can be used in solar powered mobile phone rechargers or in the recharging units of outdoor stand-alone, low-capacity solar power supplies, and is expected to be useful in a range of applications in the age of ubiquitous broadband communications.
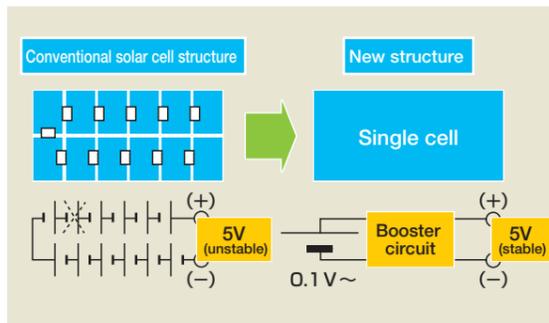

Ultra low-voltage input booster technology

Ozone sampler technology

A technology for detecting harmful substances developed by NTT Energy and Environment Systems Laboratories uses a simple accumulation-type sampler to measure local ozone levels. Ozone is a primary component of photochemical oxidants and considered to be a harmful atmospheric pollutant. However, given its superb cleaning and sterilization properties, it is likely to continue to be used in various commercial and industrial applications.

The new ozone sampler, which measures the degree of color fading of chemically treated paper that reacts selectively to ozone, comes in the form of a simple badge that indicates indi-

vidual ozone exposure levels. This technology is expected to contribute to occupational safety for those working in waterworks departments, food processing services, and various cleaning industries.

Amount of ozone exposure

0
200
400
600

(ppb x hour)
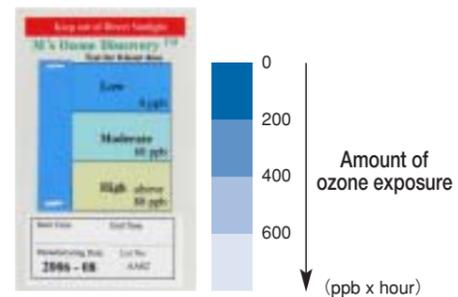
Ozone badge
Color fading of chemically treated paper from blue to white according to amount of ozone exposure

Modulated laser module for high temperature operations

NTT Photonics Laboratories has developed a 10-Gbit/s directly modulated laser module for high temperature applications.

Laser modules used in high-speed optical access systems need to be compact and energy-efficient to reduce environmental impacts. Developing laser modules that operate stably at high temperatures without requiring cooling devices was essential to meeting such demands.

NTT Photonics Laboratories applied high resistance semi-insulating structures doped with ruthenium to both sides of a directly modulated laser to create a laser chip that delivers 10-Gbit/s direct modulation at the high temperature of 85℃. In the future, the lab hopes to develop an optical transmission module capable of operating at even higher temperatures.

A module containing a laser chip developed by NTT Photonics Laboratories

Promoting Environmental Education and Communication

> · Publishing the latest environmental information in printed reports and on our website
> · Participating actively in broader environmental protection initiatives to contribute to the creation of a sustainable society
> · Educating employees and putting priority on communication with our stakeholders

Providing information on environmental activities

The NTT Group has reported on its implementation of various corporate environmental activities based on the NTT Group Global Environmental Charter, starting with its Environmental Protection Activity Reports from 1999 and CSR Reports from 2005.

The NTT Group environmental activity website introduces Group environmental activities in an easy-to-understand format using various visual content and content geared towards children. We also run advertisements on our environmental initiatives in business and general magazines as part of our efforts to communicate with as many stakeholders as possible.

"Kankyo goo", a comprehensive portal site for environmental information operated by NTT Resonant, provides a variety of useful content including recent news, CSR-related topics, and information about environmental management and business. NTT DATA too helps to operate a MIYAKE-ECO.NET site to support the recovery of Tokyo's Miyake-Jima, an island devastated by a volcanic eruption in 2000. This site is used to attract tourists through a blog and pod-casting to provide information about Miyake-Jima's natural environment.

Magazine advertisement presenting NTT Group environmental activities

NTT Group Environmental Activities website
http://www.ntt.co.jp/kankyo/e/

Participating in broader initiatives

The NTT Group actively engages in a range of broader initiatives with the aim of sharing the results of its environmental technology R&D to reduce the environmental impact of society as a whole. We are also an active partner in several global environmental organizations such as the WBCSD (World Business Council for Sustainable Development) and GEA (Global Environmental Action).

In fiscal 2007, we continued to participate in the Ministry of Environment's Japan Low Carbon Society Scenarios toward 2050 Project to study and plan long-term scenarios for countering global warming. This year, we reported on the potential for ICT applications to reduce greenhouse gas emissions by delivering efficiencies in manufacturing industries. The NTT Group is also a participant in a Ministry of Internal Affairs and Communications research project on the utilization of ICT systems and networks for reducing environmental impacts, contributing to the publication of a guidebook titled "Environment-Friendly ICT Use".

External evaluation

NTT Communications was ranked first in the Communications and Service Industries category of the 10th Nikkei Environmental Management Survey announced in December 2006. With NTT WEST, NTT EAST, NTT FACILITIES and NTT DoCoMo ranked 2nd to 5th in the same category, NTT Group companies took all of the top five slots.

Terminology Environment-Friendly ICT Use: A guidebook outlining strategies for reducing the negative environmental impacts of ICT caused by higher electricity consumption and increasing the positive impacts of ICT in reducing the need for movement of people and goods.

Employee education

The NTT Group holds regular study sessions for employees in environmental leadership roles to further drive corporate environmental activities and boost awareness of environmental issues among employees. The introduction in fiscal 2007 of a distance learning system provided by NTT LEARNING SYSTEMS prompted a rapid rise in the number of participants compared with the traditional on-site group format. This also helped cut related CO_2 emissions by approximately 34% owing to travel reductions.

All NTT Group companies conduct a range of activities to raise the environmental awareness of their employees, including the display of CoolBiz and WarmBiz energy conservation dress code posters, education through CSR newsletters and company intranets, distribution of desk pad calendars and memo pads inscribed with environmental messages, and environmental poetry contests.

CoolBiz Poster (NTT WEST)   Environmental poem calendar (NTT DATA)

	Company	Initiatives
Examples of employee education initiatives	NTT	・Display of environmental policy posters, etc.
	NTT EAST	・Display of posters　　・Intercom announcements about energy conservation, etc.
	NTT WEST	・Display of CoolBiz and WarmBiz posters in every section ・Promotion of WarmBiz dress code in NTT WEST-HOKURIKU CSR newsletters
	NTT Communications	・Environmental information shared on intranet bulletin board　　・Distribution of desk pad calendars and memo pads ・Display of posters and environmental slogans
	NTT DATA	・Display of environmental policy posters　　・Distribution of environmental e-zine　　・Organization of environmental photo contest ・Organization of environmental poetry contest with winning entries used in calendars
	NTT DoCoMo	・Display of environmental policy posters　　・Dissemination of environmental information through in-house publications and intranet ・Collection of used mobile phones from employees and their families
	NTT COMWARE	・Announcement and implementation of personal "Environmental Challenge" targets by employees
	NTT FACILITIES	・Organization of environmental slogan contest　　・Poster contest

Initiatives to Preserve Biological Diversity

・Participating in activities to protect the natural environment through ecosystem protection and forest improvement projects designed to preserve biological diversity

NTT Group companies engage in environmental protection activities such as ecosystem protection and forest improvement projects designed to preserve biological diversity.

NTT WEST has been working with a local NGO to protect the dollarbird (*Eurystomus orientalis*), a roller species that breeds over summer in Japan and has been designated as an endangered species in the Ministry of the Environment's Red Data Book. Activities have included placing nest boxes on NTT telephone poles and antennas and providing works vehicles for this project. NTT DoCoMo has also been installing nest boxes on base stations, and working to protect biological diversity by integrating systems for environmental protection into its communication equipment and infrastructure.

As a part of its environmental protection activities, NTT DoCoMo has since 1999 been implementing a DoCoMo Woods project to protect local woods as locations to hold nature classes and learn about biodiversity with members of local communities. The DoCoMo Woods project utilizes the Forestry Agency's "Corporate Forest" program and "Green Fund" of the National Land Afforestation Promotion Organization. As of March, 2007, DoCoMo Woods had been established in 32 locations, including some overseas locations, and covered a total area of nearly 123 hectares.

Installing a dollarbird nest box

Environmental protection activities at a DoCoMo Wood

Safe and secure communication

Safe and secure communication

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.

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.

Providing Safe and Secure Communications Services

- Maintaining and managing our communications infrastructure to consistently provide highly reliable communications services
- Implementing measures to prevent further failures in the Hikari Denwa optical fiber telephone service

Communications infrastructure maintenance and management

This nation's communications infrastructure plays a vital role in supporting socioeconomic activities and is indispensable as a lifeline that helps ensure public safety, which is why we build NTT Group communications equipment to withstand disasters, and operate and maintain our communications infrastructure so that it will always function properly. NTT EAST, NTT WEST, NTT Communications, and NTT DoCoMo monitor communications networks 24 hours a day, 365 days a year from their respective operations centers, and can restore service by remote switching to backup systems in the event of system failures caused by disasters or other factors.

Public telephone use has decreased due to the proliferation of mobile phones, but NTT EAST and NTT WEST continue to maintain public phones (58,000 and 51,000 respectively) to ensure that communications remain available during emergencies and natural disasters.

The NTT Group's communications infrastructure

Mobile phones (FOMA)
- 35,700 outdoor base stations
- 10,400 indoor base stations

- 11.86 million telephone poles

- 1.75 million km of telephone lines, optical fiber, and other types of communications cable

- 620,000 km of conduit lines
- 650 km of cable tunnels

- 5,100 km of domestic undersea cables

Topics

Agreement to develop undersea optical cable system between Japan and Russia

NTT Communications and TransTeleCom of Russia signed a memorandum of understanding on February 27, 2007 to develop the Hokkaido-Sakhalin Cable System (HSCS), an undersea optical cable system that will connect Ishikari, Hokkaido in Japan and Nevelsk, Sakhalin in Russia. The project is slated for completion by the end of 2007. HSCS will be connected to TransTeleCom's 50,000 km optical fiber backbone and will be the shortest telecommunications route from Japan to Russia and Europe. HSCS will not only boost communications quality between Japan and Russia and Europe, but will also enhance international communications network reliability through augmenting the existing Indian Ocean route.

Prevention of further failures in the Hikari Denwa optical fiber telephone service

Between February and December 2006 Hikari Denwa optical fiber telephone services offered by NTT EAST and NTT WEST became intermittently unavailable for brief periods, particularly from September 19 to 21 in the NTT EAST area and from October 23 to 25 in the NTT WEST area. We sincerely apologize to our customers for the considerable inconvenience caused by this problem.

Server software issues and insufficient processing capacity were behind the problem, and we are responding by retesting software and upgrading network equipment and capabilities. In addition to such initiatives to prevent reoccurrences, we have also established prompt discovery and service restoration systems and procedures to address any problems that may arise. We are looking into further ways of bolstering network reliability and minimizing the impact of system failures on our customers as we continue to improve operational methods and train engineers.

Terminology **Backbone**: A high-capacity communications trunk line.

Providing Communications Services to Withstand Disasters

- Implementing various measures in line with basic policies of improving communications network reliability, securing critical communications, and enabling prompt restoration of service
- Providing enhanced disaster-response capabilities through various prevention systems and solutions

Improving the reliability of communications networks

The NTT Group has learned many lessons from its experiences during great disasters of the past, and is putting accumulated expertise to work in the creation of ever more reliable communications networks.

For example, transmission lines are multi-routed for redundancy and telephone exchanges that house transit switches are sufficiently dispersed to enable communications to be rerouted to avoid damaged areas in the event of a natural disaster. We monitor our nationwide communications network 24 hours a day and are ready to respond to any eventuality at any time.

Communications infrastructure built to withstand disasters

NTT Group communications equipment, buildings, and steel towers are designed to withstand natural disasters in accordance with predetermined standards.

Earthquakes
Our buildings and steel towers are built to withstand quakes of a seismic intensity of 7 (Japan Meteorological Agency seismic intensity scale) so that we are able to promptly restore system functionality after an earthquake, and we implement earthquake-proofing measures such as securing indoor communications equipment.

Fires
We install fire shutters and doors and keep windows in our equipment rooms to a minimum to prevent the spread of fires. We also equip all of our buildings with smoke detectors and fire-extinguishing equipment.

Water damage
We install flood barriers and doors appropriate to the surrounding geography to prevent tidal, tsunami, and floodwater damage.

Wind damage
NTT's buildings and steel towers are designed to withstand typhoon wind velocities of 60 m/s.

Power outages
To maintain power supply during power outages we have equipped our telephone exchanges with back-up power generators and storage batteries.

Transmission line multi-routing

Route switching

Disaster site

Communications can be instantly rerouted to avoid damaged transmission lines.

Securing critical communications

As soon as an earthquake or some other disaster strikes, the telephone system of the affected area is inundated with calls from worried friends and relatives. Under such conditions, we suppress ordinary phone traffic to secure critical communications services necessary to conduct emergency rescue and restoration operations, maintain public order, and keep 110 and 119 emergency number services going.

We also provide Disaster Emergency Dengon (Message) Dial (171) and other services to the general public as a means of checking on the safety of relatives and friends in affected areas, and make our public telephones available free of charge and provide specially installed public telephones at evacuation sites and other facilities in affected areas for use by residents.

Prompt restoration of services

NTT Group companies station highly mobile disaster response equipment at locations throughout the country to aid in the prompt restoration of services and securing of critical communications in the event of a natural disaster. This equipment, which includes power supply vehicles, portable satellite communications equipment, and portable mobile base stations, can be deployed anywhere in response to a disaster. In the event that communications services are disrupted by a major disaster, NTT Group and affiliated company employees immediately set up a disaster management headquarters and other emergency structures to form a wide-area support organization that works to promptly restore services.

Topics

Restoring service after the 2006 Hengchun earthquake

On December 26, 2006 an earthquake off Taiwan's southwestern coast near Hengchun damaged multiple undersea international communications cables, having a major impact on international communications services. NTT Communications in close cooperation with global telecommunications carriers secured alternate cable routes and made emergency repairs, as a result of which 90 percent of services disrupted by the quake had been restored within two days, considerably earlier than other companies.

Enabling people to check on the safety of relatives and friends in disaster areas
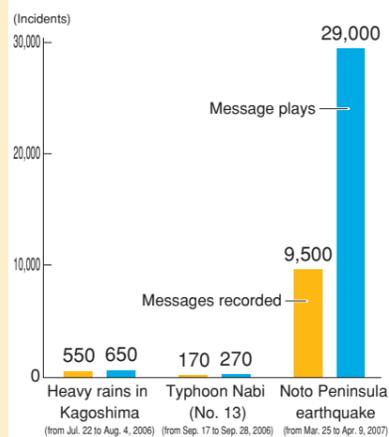
In the event of a major natural disaster, NTT offers a range of services to the general public as means of verifying the safety of family, relatives, and friends in affected areas. We launched our Disaster Emergency Broadband Message Board (Web 171) service in October 2006, adding to our existing Disaster Emergency Dengon (Message) Dial (171) and i-mode Disaster Message Board Services. To help promote the effective use of these services, we provide opportunities for people to try them out on the first day of every month and other designated days.

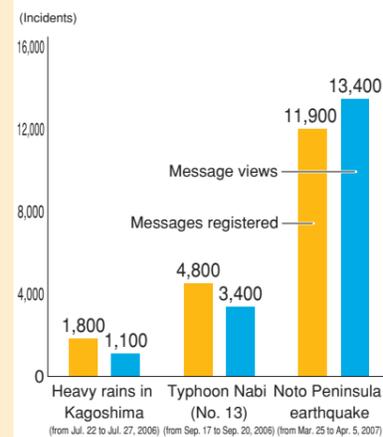## Emergency message service use in fiscal 2007

171 Disaster Emergency Dengon (Message) Dial

A service for registering and checking information on the safety of individuals via voice mail using phone numbers in the affected area as mailboxes.

(Incidents)

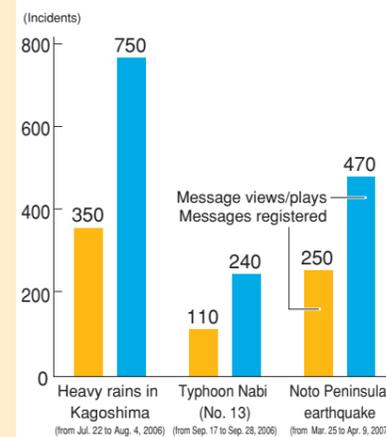|	Messages recorded	Message plays
Heavy rains in Kagoshima (from Jul. 22 to Aug. 4, 2006)	550	650
Typhoon Nabi (No. 13) (from Sep. 17 to Sep. 28, 2006)	170	270
Noto Peninsula earthquake (from Mar. 25 to Apr. 9, 2007)	9,500	29,000

i-mode Disaster Message Board Service

A service for registering and checking information on the safety of individuals in text from the Disaster Message Board on mobile phones' iMenu.

(Incidents)

	Messages registered	Message views
Heavy rains in Kagoshima (from Jul. 22 to Jul. 27, 2006)	1,800	1,100
Typhoon Nabi (No. 13) (from Sep. 17 to Sep. 20, 2006)	4,800	3,400
Noto Peninsula earthquake (from Mar. 25 to Apr. 5, 2007)	11,900	13,400

Web171 Disaster Emergency Broadband Message Board

A service for registering and viewing information on the safety of individuals in text, sound, and images via the Internet.

(Incidents)

	Messages registered	Message views/plays
Heavy rains in Kagoshima (from Jul. 22 to Aug. 4, 2006)	350	750
Typhoon Nabi (No. 13) (from Sep. 17 to Sep. 28, 2006)	110	240
Noto Peninsula earthquake (from Mar. 25 to Apr. 9, 2007)	250	470

- We provide the public with opportunities to try out our emergency message services during Japan's Disaster Prevention Week from August 30 to September 5, and Disaster Prevention and Volunteer Week from January 15 to 21, as well as from January 1 to 3 and the first day of every month. In fiscal 2007, on the first day of every month and during the first three days of January, the public tried out our emergency message services a total of approximately 450,000 times.

Website >>> http://www.ntt.co.jp/saitai/ (in Japanese only) ● NTT Group's disaster countermeasures website

Disaster response training

Each year, NTT Group companies conduct disaster response training programs based on a variety of scenarios. Each training program focuses on new aspects of disaster response in accordance with current national and municipal policies and issues made apparent by actual disasters.

In the event of an actual disaster, we work to apply the know-how acquired through such training to promptly restore communications services.

Topics

Disaster response training simulating a road blockage following a major quake

On February 22, 2007, NTT EAST and NTT DoCoMo together with the Japan Ground Self-Defense Force (JGSDF) conducted a disaster response training exercise based on a scenario in which a road had been rendered impassable by a major earthquake. Thirty people from NTT EAST, 10 people from NTT DoCoMo, and 60 people from the JGSDF took part in the training exercise. To secure communications in the disaster zone and at evacuation sites, large JGSDF transport helicopters airlifted NTT EAST and NTT DoCoMo disaster response equipment, specially installed public telephones were deployed, and mobile phone base stations were equipped with emergency power supplies.

Disaster response equipment being loaded into a large transport helicopter

A total of 100 personnel from NTT EAST, NTT DoCoMo, and the JGSDF participated in the exercise

A drill to restore power to a mobile phone base station using an emergency power supply

Disaster response assistance

NTT Group companies provide a wide range of useful disaster response systems and solutions, including services for delivering emergency earthquake information, and for organizations to contact employees and check on their safety in the event of a disaster.

NTT Group disaster response systems and solutions

Name	Description	Organization
Disaster response information communications system	This system enables two-way communications between municipal authorities and local residents and between residents themselves using videophones etc. In the event of a disaster, authorities can automatically display evacuation information. (Developed by NTT Information Sharing Laboratory Group in March 2007, service to be offered at a future date)	NTT EAST NTT WEST
Anshin Hotto ("breathe easy") service for Hikari Denwa optical fiber telephone service	This service uses uninterruptible power sources (UPS) to ensure uninterrupted Hikari Denwa optical fiber telephone services even during power outages. (Available since March 2007)	NTT EAST NTT FACILITIES NTT ME
Power outage Anshin ("peace of mind") service for Hikari Denwa optical fiber telephone service	This service uses uninterruptible power sources (UPS) to ensure uninterrupted Hikari Denwa optical fiber telephone services even during power outages. (Available since November 2006)	NTT WEST NTT NEOMEIT
Emergency Earthquake Alert Service	This service provides immediate emergency information about earthquakes issued by the Japan Meteorological Agency transmitted through nationwide IPv6 multicast. (Available since November 2006)	NTT Communications
Emergecall emergency contact and safety confirmation system	This service enables organizations to simultaneously contact employees and check on their safety in the event of a disaster or other emergencies. A new version available from February 2007 includes added functionality for the automatic transmission of earthquake and tsunami information from weather and disaster response sources to registered users.	NTT Advanced Technology

Creating a Safe and Secure Environment for ICT Users

- Investing resources in the creation of a secure environment for ICT users
- Conducting R&D to develop technology for ensuring communications network safety and security

Achieving a safe and secure environment for ICT users

The rapid spread of e-money and Internet banking has been accompanied by an increase in ID and password theft. The use of file sharing software has also led to the unauthorized access of data. The NTT Group is taking various measures to address these problems. For example, Plala Networks has added a Winny Filter function for blocking traffic from the Winny file sharing network as a security service for its B

FLET'S optical access service for private users. NTT DoCoMo too offers a service for enabling users to remotely lock their mobile phones, and NTT IT offers USB keys with which users can safely operate their PCs from remote PCs.
The NTT Group will continue to invest resources in initiatives to create a safer and more secure environment for its customers.

Topics

Mobile phone-based one-time password service
Our one-time password service is a system for enhancing user authentication and security by changing user passwords each time used. Generating such passwords previously required specialized hardware, but with NTT DATA's newly introduced sys-

tem, users can now download a special password generation software program to their mobile phones. NTT Group companies are constantly working on security enhancements such as this for Internet banking and other financial transactions.

Creating a safe and secure user environment through R&D

NTT Group companies conduct a wide range of advanced encryption and other security-related research to protect

communications network integrity from security threats and create a safe and secure user environment.

Technology developed by the NTT Group

Name	Description	Research organization
Watermark authentication platform	This is a platform for enabling simple authentication using paper cards with watermarked photos or logos printed on those cards.	NTT Cyber Space Laboratories
Technology for the effective use of sensor databases	This is platform configuration technology for building systems for handling time series data constantly generated in large volumes by ubiquitous data sources. It can be used as a platform for applications such as logistics, healthcare, crime prevention, traffic control, and disaster prevention.	NTT Cyber Space Laboratories
A faster, more reliable, more functional database management system	NTT Cyber Space Laboratories has developed redundant configuration technology (cluster technology) featuring a queuing system synchronized with operational data and designed to boost the reliability of the PostgreSQL open source database for the provision of 24-hour services and stable services during times of disaster.	NTT Cyber Space Laboratories
International standard encryption algorithm "Camellia"	Camellia is an encryption algorithm featuring world-class security and performance to support the advanced information society. It is the first encryption algorithm developed in Japan to have been adopted as international platform technology into Linux and other international open source software.	NTT Information Sharing Platform Laboratories
Quantum encryption	NTT Basic Research Laboratories, in collaboration with the National Institute of Informatics Stanford Division and the National Institute of Standards and Technology has succeeded in transmitting quantum encryption keys using single photon-level light over a world-record 200 km of optical fiber.	NTT Basic Research Laboratories

Ensuring Information Security

- Promoting information security management
- NTT Group-wide initiatives to safeguard customers' personal information

Promoting information security management

As a leader in the information and telecommunications industry, the NTT Group recognizes its responsibility to promote information security management. In addition to implementing the secure management of the personal information of our customers, we also focus on initial prevention, minimization of damage, and prevention of reoccurrence of security incidents such as virus infection and unauthorized access under the leadership of NTT-CERT (see below). The number of NTT Group company sites that acquired Information Security Management System (ISMS) and Privacy Mark certifications also grew considerably in fiscal 2007.
NTT COMWARE is focusing on in-house security diagnosis and in fiscal 2007 also carried out a diagnosis of company databases.
In addition to NTT Group internal security measures, NTT

Communications has launched an Information Security Guide website to provide its corporate customers with information on IT system security.

ISMS and Privacy Mark certifications

	FY 2006	FY 2007
ISMS	129 sites	167 sites
Privacy Mark	50 companies	79 companies

- The above figures are totals for NTT EAST, NTT WEST, NTT Communications, NTT DATA, NTT COMWARE, and NTT FACILITIES.

Topics

NTT-CERT
As the Computer Security Incident Response Team (CSIRT) for the entire NTT Group, the NTT-CERT team operated by the NTT Information Sharing Platform Laboratories works with security managers and systems administrators to deal with incidents and vulnerabilities in NTT Group network/information systems, also coordinating responses and providing technical support.
NTT-CERT started to develop a prototype for a diagnostic security risk management system in 2005, and launched pilot operations at some of NTT Group companies in fiscal 2007. These efforts resulted in a working system that incorporates frontline expertise and addresses frontline needs. The NTT-CERT team

plans to expand use of the system groupwide. NTT-CERT has also worked to systemize security guidelines, configuration standards and checklists.

Protecting customers' personal information

The NTT Group has established an NTT Group Information Security Policy that states its position on information security, and is doing its utmost on a groupwide basis to protect the personal information of its customers. Each of the NTT Group companies has established a privacy policy for protecting customers' personal information. As an example of this, NTT EAST and NTT WEST conduct departmental workplace inspections, some of which are carried out by personnel from

other departments, to verify the proper protection of customers' personal information. NTT DoCoMo too provided employees with instruction on personal information security using information booklets, training videos and e-learning, and NTT COMWARE conducted employee education activities related to file sharing software.
The NTT Group will continue to strengthen its efforts to protect its customers' personal information.

Raising Public Awareness about Appropriate Use of Communications Technology

- Studying issues related to the spread of ubiquitous broadband communications from a social sciences perspective
- Raising public awareness about appropriate communications technology use
- Ensuring child safety with ICT

Research in support of safety and security in the age of broadband communications

The NTT Group is involved in research from a social sciences perspective to identify issues related to the spread of broadband ubiquitous communications and ways to address them. InfoCom Research, Inc. (ICR) and NTT DATA Research Institute for Systems Science conduct research from various perspectives on the relationship between social trends and information communications. In fiscal 2007, ICR announced research findings concerning the economic ramifications of the ICT and mobile communications industries.

The Mobile Society Research Institute conducts research into the benefits and pitfalls of mobile phones with the aim of promoting the appropriate use of mobile communications and the betterment of society through leveraging mobile communications. In fiscal 2007, the Institute published research findings on the psychology of mobile phone dependency, and on the use of mobile phones during disasters. NTT Energy and Environment Systems Laboratories has developed a Gross Social Feel-Good Index to evaluate ICT service sustainability. The index evaluates triple bottom line satisfaction and the extent to which people are satisfied with their lives.

The NTT Group will continue to conduct a range of research projects aimed at ensuring the safe and secure use of ubiquitous broadband communications.

Promoting appropriate use of ICT

The Internet and mobile phones have already become indispensable tools in our society, but they have also given rise to a range of social issues related to the appropriate and ethical use of ICT. To address such issues, we have been educating the public on appropriate ICT use and working to foster a wholesome ICT culture. Through these activities, we hope to contribute to the resolution of ICT-related social problems and the creation of a safer and more secure Internet and mobile communications environment.

Educational activities to promote appropriate communications technology use

	Name	Description	Organization
Events	Educational support	NTT Group companies dispatched instructors for the e-Net Caravan organized by the Ministry of Internal Affairs and Communications, and accepted teachers for private sector training, etc.	NTT Group companies
	NTT Dream Kids Net Town 2006	Events at which children can learn about communications. Held in Tokyo and Sendai in fiscal 2007, attracting 940 participants.	NTT Group companies
	Internet Safety Workshops	Held at elementary schools to inform children about skills and manners for trouble-free communication in the digital age. In fiscal 2007, 3,078 students attended the workshops, which began in September 2006.	NTT EAST
	Internet Basics	Classes on Internet use aimed at contributing to IT education and the improvement of information ethics, and bridging digital divides. Held three times in Tokyo and once in Osaka in fiscal 2007.	NTT Communications
	Mobile Phone Safety Program	Classes providing guidance to children and others on topics such as safe and secure mobile phone use, the risks of using online dating sites, and how to deal with spam e-mail. About 1,400 classes were held nationwide in fiscal 2007 in elementary, junior and senior high schools, local community centers, and other venues.	NTT DoCoMo
Online activities	Super Media Kids (in Japanese only)	A website for teaching children how to use various media over the Internet and on phones. Contents also include quizzes on Internet Safety Workshop contents and information for parents and educators.	NTT EAST
	Kids' goo (in Japanese only)	Kids' goo is a web portal offering safe, convenient, and useful Internet services for elementary school students, and information on safe Internet use for children. Other contents include the Seven Rules of Internet Use and columns by elementary school teachers offering advice to parents.	NTT Resonant

Terminology ICT service sustainability: The degree to which ICT services can contribute to society on a continuing basis. Triple bottom line: An idea promoting balance between economic, environmental, and social concerns, coined by John Elkington, cofounder of SustainAbility (a UK-based think tank).

Helping to protect children

Children today face a rapidly changing environment in which they are increasingly falling victim to crime, leading parents, schools, and entire communities to urgently consider protection measures.

The NTT Group is focusing resources on various initiatives to ensure the safety of children. NTT DoCoMo, for example, offers Kids' PHONE mobile phones with protection alarms and GPS functions that allow parents to pinpoint their child's whereabouts. In addition to crime prevention functions, NTT DoCoMo also offers services that enable children to use mobile phones without worry, such as an expanded version of its Kids' iMenu and a function to ward off nuisance calls, both of which were launched in fiscal 2007. NTT Group companies have also started offering systems for local governments that use IC tags to track the whereabouts of children, and services for schools to simultaneously send emergency messages to the phones, faxes, e-mail addresses, mobile phones, and mobile phone e-mail addresses of every parent or guardian.

The NTT Group will continue to put the technologies of its member companies to use in initiatives aimed at ensuring child safety.

Topics

Meru-Robo Digital Log

NTT has developed Meru-Robo Digital Log, an interactive child monitoring system that combines Action Switch Platform — a technology from NTT Cyber Solutions Laboratories for controlling robots from mobile phones — with a personal robot (called "PaPeRo", and developed by NEC Corporation). The Meru-Robo feature in this system enables parents to check on their children from a remote location and monitors children according to instructions included in mobile phone text messages sent by parents.

In 2006, field tests using the system were conducted between parents and two facilities — Might Project (a day-care facility for the early development of abilities) and Makoto Aijien (a nursery facility).

Parents participating in the field tests operated the robot from distant locations, checking on the wellbeing of their children, and sending messages to their children that were read out loud by the robot. Video messages of the children filmed through the robot's eye-installed camera were also sent by the system to parents' mobile phones. The Robo Digital Log feature in this system — a blogging function for communication between facility staff and parents — was also tested.

We plan to build on the results of this trial to make further improvements to the Meru-Robo Digital Log system.

Meru-Robo Digital Log field test

Mobile phone access restriction services

To create a safe environment for mobile phone use by minors, NTT DoCoMo provides filtering services for restricting access to inappropriate sites, and in March 2007 launched new initiatives to further promote the use of these services.

For example, all new subscribers, both adults and minors, were asked if they wanted to use these services, and service names were changed to make them more appealing to junior and senior high school students.

NTT DoCoMo also joined the Telecommunications Carriers Association , KDDI CORPORATION, and SOFTBANK MOBILE Corp. in launching a Protect Children from Inappropriate Sites! campaign, and in March 2007 held joint events to promote the use of such filtering services.

Mobile phone screen displaying a message sent to the Meru-Robo Digital Log robot

Screenshot of a Robo Digital Log blog

有害サイトから子供を守る！

Protect Children from Inappropriate Internet Sites! campaign logo

Improving the Quality of Our Products and Services

・Using customer feedback to improve customer satisfaction
・Improving the quality of our products and services
・Conducting R&D with universal design principles in mind

Improving customer satisfaction

The NTT Group believes in putting its customers first, and as a customer driven organization we are dedicated to delivering customer satisfaction (CS). We have established systems for enabling customers to provide their views, and we apply this feedback to improve our operations and develop new services.

Customer consultation centers at NTT EAST, NTT WEST, and NTT DoCoMo all welcome customer opinions and requests in addition to product, service, and repair inquiries. The three companies combined received approximately 500,000 customer opinions in fiscal 2006, and 400,000 in fiscal 2007. Our customers also reach us through our website and e-mail and we interact with our customers through CS questionnaires and interviews.

Each of our Group companies also institutes mechanisms for promptly acting on customer feedback to improve business operations and services. For example, NTT EAST's Smile Committee, NTT WEST's Customer First Activities Working Group, and NTT DoCoMo's CS Promotion Committee are all companywide initiatives for studying and implementing CS improvements in their respective organizations.

NTT strives to improve CS in numerous other ways too. NTT DoCoMo and NTT FACILITIES instill a CS mindset in their employees through the best practices CS case studies they have compiled of group companies and other companies and through lectures from CS consultants. NTT DATA has introduced a performance awards program for CS achievements to foster a CS mindset in its employees.

NTT COMWARE organizes activities for employees such as lectures and hands-on work experience in the belief that boosting CS depends on boosting employee satisfaction. These activities are part of NTT COMWARE's efforts to drive gains in CS by creating a company culture that excites and motivates employees. NTT COMWARE also held joint CS get-togethers with NTT DATA to exchange views with CS promoters in other companies.

The NTT Group will continue to place a high priority on further improving CS.

NTT WEST customer consultation center where customer feedback is gathered, analyzed, and implemented in company "customer first" activities

NTT COMWARE lecture

NTT DoCoMo's CS Report introducing DoCoMo Shops with excellent CS activity track records and lectures by CS consultants

Improving the quality of our services

To ensure the satisfaction of its customers, the NTT Group strives constantly to improve the quality of its services and technology, and provide safe and secure services that will constitute the foundation of the coming age of ubiquitous broadband communications. To this end, we are constantly building our communications infrastructure and conducting R&D on the latest technologies for providing stable optical fiber-based broadband communications.

Obtaining ISO 9001 quality management certification is another example of our continuing efforts to provide safe and secure services.

Creating user-friendly products and services

The NTT Group recognizes that population decline and the aging of society make it even more essential that communications services are easily accessible to any and every user. With accessibility in mind, we offer products and services that are user-friendly to elderly people, differently abled people, and a wide range of other users. NTT has established the Universal IT Design Center within NTT Cyber Solutions Laboratories and promotes the use of IT universal design throughout the NTT Group.

Following its development of a prototype in fiscal 2006, NTT DoCoMo released a dual-screen handset in February, 2007. Buttons on this handset have been replaced by a touch panel display in which frequently used buttons are displayed as icons. The touch panel can be operated by people who lack the physical strength or otherwise find it difficult to use traditional handset buttons.

NTT DoCoMo also offers Sound Leaf, a bone conduction receiver-microphone that sends sound waves through the bones of the skull to auditory nerves enabling people who have become hard of hearing or with hearing impairments to communicate effectively.

NTT DoCoMo implements initiatives inspired by universal design concepts under the DoCoMo Hearty Style brand name. DoCoMo Hearty Plaza shops are designed using universal design concepts, and have staff on location who can communicate in sign language as well as shuttle services to and from nearby train and subway stations. Telephone workshops offered at the shops for visually and hearing impaired customers teach skills such as creating e-mail and using videophones.

Universal IT Design Center website
http://www.waza.jp/ud_e/

Bone conduction receiver-microphone Sound Leaf

Dual-screen mobile phone

DoCoMo Hearty Plaza

Topics

Hanamaru Checker trial service begins

NTT Cyber Solutions Laboratories on November 21, 2006 launched a trial of its new Hanamaru Checker software application.

Hanamaru Checker is a tool that enables content developers to verify the accessibility of websites based on universal design guidelines. Hanamaru Checker not only identifies accessibility issues in website design, but also displays existing websites that serve as examples of desirable improvements, enabling users who are not universal design experts to easily check the accessibility of their websites. Hanamaru Checker itself conforms to accessibility guidelines and people who are visually impaired can operate the software through its voice browser. We provide Hanamaru Checker in the hope that it will popularize the use of universal design concepts in websites.

The trial service is available through Waza (http://www.waza.jp/ in Japanese only), a website that introduces new technologies developed by NTT Cyber Communications Laboratory Group. Users need only enter a website address to check accessibility automatically. Feedback from the trial will be used to further improve Hanamaru Checker.

Hanamaru Checker enables users to check degree of website accessibility at a glance.

Product and Service Safety Measures

・Researching the effects of radio waves on living organisms
・Taking action on defective mobile phone battery packs

Mobile phone health concerns

Many people are concerned about the effects of radio waves emitted by mobile phones on the human body. The World Health Organization（WHO）and Japan's Ministry of Internal Affairs and Communications（MIC）have been investigating the matter, and based on their findings, radio-radiation protection guidelines and regulations have been drawn up in Japan concerning human exposure to electromagnetic fields. NTT DoCoMo operates base stations in strict accordance with those guidelines and regulations and insures that its mobile phone handsets also comply with those guidelines. NTT DoCoMo is also actively conducting its own research into possible effects of radio waves on living organisms with the encouragement of MIC and WHO.

For example, in November 2002, NTT DoCoMo, KDDI CORPORATION, and SOFTBANK MOBILE Corp. jointly commissioned Mitsubishi Chemical Safety Institute Ltd. to conduct a long-term study on the effects of radio waves on living organisms. The study, which was concluded with the publication of results in January 2007, identified no adverse effects from radio waves on living organisms at either genetic or cellular levels. To educate the public on the safety of radio waves, NTT DoCoMo began in April 2006 to post information on its website regarding basic knowledge about radio waves, NTT

DoCoMo compliance with national radio wave regulations, and actions currently being taken around the globe.

Radio field intensity measuring device with receiving antenna for measuring radio waves at mobile phone base stations

Responding to product-related accidents

When a product-related accident comes to our attention, we promptly release advisories to our customers and recall the product. We then identify the cause of the accident and work diligently to ensure that it does not happen again.

Topics

Taking action on defective mobile phone battery packs

In December 2006 some battery packs for NTT DoCoMo mobile phones were found to be defective. The battery packs, model number D06, had been manufactured in May 2006 or earlier for use in FOMA D902i, FOMA D902iS, and FOMA D903i mobile phones. We sincerely apologize for any concern or inconvenience this caused for our customers.

The D06 batteries could, if subjected to an external impact resulting in a surface scratch or dent, generate excessive heat and possibly rupture. We received one report of a rupture, and 17 reports of overheating or rupture thought to be caused by abnormal or excessive external shock. In response, NTT DoCoMo suspended sales of the FOMA D902i, D902iS, and

D903i handsets and DoCoMo Shops were provided with replacement batteries. NTT DoCoMo also conducted an extensive customer notification campaign through direct mail, newspaper advertisements, website, and i-mode news to replace the batteries.

The defect was due to problems in the manufacturing process that deformed an electrode plate within the battery in such a way that the plate could come into contact with and damage the battery's insulation sheet.

To prevent a reoccurrence of such problems and ensure the safety of its batteries, NTT DoCoMo is reviewing its own safety tests, and in view of the fact that the main cause was a manufacturing defect, suppliers too have been asked to improve product quality and tighten their quality management systems.

Team NTT communication

Team NTT communication

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.

Creating Vibrant and Dynamic Workplaces

- Expanding employment opportunities for the elderly and differently abled people, and promoting gender equality in the workplace
- Programs for helping employees to maintain a good work-life balance
- Providing employees with the scope to realize their aspirations in workplaces that also offer safety and security

Diversity in human resources

The NTT Group sees its human resources as the foundation on which its business is built, and focuses on hiring people capable of performing in strategic areas such as IP and broadband technologies and international business in response to changes in the business climate and globalization of the information and communications sector.

We are also committed to expanding employment opportunities for differently abled people. In 2004, we established NTT CLARUTY, a special subsidiary for promoting the hiring of such people. Our employment rate for differently abled people stood at about 1.7%[1] as of June 2007, and we shall continue with our efforts to further boost such hiring throughout the NTT Group with the aim of surpassing the level of 1.8% mandated by law.

The NTT Group has since 1999 also maintained a continuing employment system that allows retirees to continue to work until the age of 65 if they wish. Numerous people have used this system to contribute their accumulated experience and skills to our companies.

The NTT Group is also promoting gender equality to provide equal opportunity in the workplace to both men and women. Yearly gains have been made in the number of women recruit-

ed and occupying management positions, and with the establishment of a Diversity Promotion Office in October 2007, we are working to ensure that women have even more opportunity to realize their potential in the future.

Many non-Japanese work as either full-time employees or postdoctoral researchers[2] at NTT Laboratories. There is also a program in place to invite guest researchers from overseas, providing opportunity for a variety of prominent researchers, and there are many non-Japanese participating in internship programs as well.

1. Figures for wholly owned NTT Group companies, as well as three listed companies: NTT DoCoMo, NTT DATA, and NTT Urban Development
2. Contract employees with doctorates

Employment in the NTT Group

	NTT and five core group companies[3]		
	Men	Women	Total
Total employees[4]	32,626	5,596	38,222
Management level employees (also included in total employees)[4]	8,246	224	8,470
New employees[5]	1,093	394	1,487

3. The five core group companies are: NTT EAST, NTT WEST, NTT Communications, NTT DATA, and NTT DoCoMo   4. As of March 31, 2007   5. As of April 1, 2007

Achieving a good work-life balance

To help NTT employees maintain a good balance between home and career, we have long offered child care and nursing care benefits that go beyond legally mandated levels, and as of 2007, we enhanced child care benefits in various ways, including extending eligibility for reduced working hours to the end of the fiscal year in which the child enters third grade as opposed to first grade. To encourage NTT employees to take advantage of these benefits, we have created an NTT Group Child Care and Family Care Support site on the NTT intranet that provides a comprehensive range of information on both NTT programs and government-operated social insurance programs. We also provide online/distance learning courses and information about NTT business developments and industry trends to employees on leave to help them make a smooth return to work.

With the declining birthrate and increasing aging of the Japanese population, we have instituted a new family allowance system that provides additional benefits to employees based on number of dependents without placing a cap on that number.

Based on principles espoused in Japan's Law for Measures to

Support the Development of the Next Generation, we will continue to develop convenient and effective support programs in the creation of a vibrant and dynamic workplace.

Examples of NTT Group family benefit programs

	Program	Description
Child care	Child care leave	Available to parents of children less than three years old
	Reduced working hours	Allows parents to limit their workday to 4, 5, or 6 hours until the end of the fiscal year in which the child enters third grade.
	Child care support service	A variety of benefits are available, such as discount coupons for drop-off and pick-up of children at daycare centers
Family care	Nursing leave	Up to 18 months of leave to provide family nursing care
	Reduced working hours	System that allows those with family members in need of nursing care to limit their workday to 4, 5, or 6 hours, for up to three years
	Flexible use of unused annual leave for family nursing care, etc.	Applicable also to sabbatical leave, volunteer work, or recurrent education
	Nursing care support service	Discount coupons that can be used to pay care providers
Other	Compensation for use of assets accumulated under employee savings scheme	Provides compensation when a withdrawal is made from an employee savings scheme for specific purposes such as child care and education
	Maternity leave	Paid maternity leave (not applicable to employees on probation)
	Leave to take care of family members	For each instance, up to five days of leave is available to care for a family member who is ill or giving birth

Developing a skilled and motivated workforce

In April 2006, the NTT Group revised its pay system to place even more priority on personal performance with the aim of further boosting employee motivation.

In addition to our established systems for training evaluators and providing employees with feedback on their personal performance evaluations, we are seeking to enhance the impartiality of our performance evaluation system and employee satisfaction with it through introducing multifaceted evaluation, using case studies to illustrate what is expected of successful employees, as well as providing training and online guidance to help employees better understand how our personnel and pay systems work.

We feel that the above enhancements to our pay system will create a better motivated, better disciplined workforce, boosting both individual employee capabilities and our overall business performance.

We provide each and every employee with the opportunity to independently develop their abilities in accordance with their own career plans, offering a range of field-specific group training, e-learning materials, online/distance learning courses, in-house certification of skill levels, and support for the earning of qualifications. In order to provide ambitious employees with the opportunity to seek new challenges, we run in-house

recruitment programs such as NTT Group Job Challenge and NTT Group Venture.

A poster promoting the NTT Group Venture program

NTT Group Job Challenge web page

A work place where everyone feels safe and secure

Occupational safety

All NTT Group companies recognize the importance of proactively implementing occupational safety programs to prevent accidents in the workplace. Work conditions and standard operation manuals are constantly under review, and case studies are used to inform employees and maintain awareness of occupational safety issues. If an accident should take place, the NTT Group performs an internal review of conditions, contributing factors, and measures for preventing recurrence, and promptly shares this information with all Group companies. We make every effort to ensure that our employees are well educated about safety issues, are constantly reminded of the importance of workplace safety, and are able to apply their knowledge in the prevention of accidents. Some of our facilities also hold thorough safety inspections on a monthly basis.

Health management

Recognizing the importance of proper employee health management, including the prevention, early detection and treatment of illness, NTT Group companies provide their employees with individualized health management counseling and encourage personal health management based on the results of comprehensive medical examinations. NTT considers mental health to be a particularly important issue, and Group companies provide preventive programs such as mental health consultation through the NTT intranet, outside counseling, and mental health seminars. Emphasis is also placed on maintaining good communication with employees in the workplace as a means of early detection of stress and other changes in mental wellbeing.

Employee benefits

The NTT Group has implemented a wide range of social welfare policies and benefits that are intended to provide security and ensure that its employees are able to devote themselves wholeheartedly to their duties from the time they join an NTT Group company until they retire. Employees are able to take advantage of these policies and benefits in accordance with their own personal life plans.

- We provide a cafeteria plan enabling employees to select from a wide range of social welfare plans that match individual lifestyles.
- We provide a wide range of information and educational programs regarding the design of personal life plans.
- Company dormitories and housing are available throughout Japan for employees posted to new workplaces as a result of transfers, etc.
- Employees may utilize any of several health management programs, including periodic examinations and counseling.
- Various asset accumulation plans are available, including employee savings schemes and employee stock plans.
- Company cafeterias, condolence and congratulatory allowances, and other lifestyle support programs are provided for employees.

Creating a Healthy Corporate Culture

・Raising employee awareness of human rights through various activities
・Surveying attitudes and conducting employee training and other awareness activities to maintain high
　ethical standards among our workforce

Raising human rights awareness

The NTT Group considers the creation of a corporate culture free of prejudice and discrimination to be essential to the formation of a well-adjusted society where human rights are respected. We also feel that actively tackling human rights issues is another aspect of fulfilling our corporate responsibility to all of our stakeholders, and as such, we encourage employees to regard human rights as a personal issue, and work to deepen their awareness and understanding so as to perform their day-to-day business activities in a way that respects human rights. We provide a broad range of human rights education focused on such issues as discrimination, people with different abilities, the elderly, foreign residents in Japan, sexual harassment, and power harassment, as well as trends in human rights in Japan and abroad. All NTT Group companies provide workshops, e-learning courses, and other programs that enable employees to learn about these issues on a continuing basis. Other activities to boost awareness of human rights include soliciting human rights slogans and ideas for posters promoting awareness of human rights from NTT employees and their families, the best of which are compiled into calendars and distributed around the workplace.

Calendar for raising awareness of human rights
(NTT EAST)

Poster announcing NTT's "No sexual harassment" policy
(NTT WEST)

Raising ethical standards

The NTT Group conducts a variety of activities to raise awareness among employees — including temporary and contract employees — of proper ethical standards and business practices. Included in these ongoing activities are lectures for both executives and employees by outside experts in human rights, e-learning programs, the display of posters, and case studies posted on the NTT intranet promoting an understanding of ethical considerations and compliance with good business practices. The responses of employees to opinion surveys are also analyzed and reflected in the content of these activities.
Drunk driving became a major social issue in 2006, and NTT ran a No More Drink-Driving poster campaign to raise group-wide awareness of this issue. Group companies also implemented various measures in addition to the display of posters, including in-house workshops, distribution of leaflets, the wearing of No Drink-Driving badges, and the deployment of breathalyzers together with key drop boxes for people who have been drinking to leave their car keys.
The NTT Group understands the importance of raising individual awareness in maintaining high ethical standards, and will continue to make every effort to promote these issues in the workplace.

No More Drink-Driving poster

Citizenship Activities

・Actively contributing to society as a corporate citizen
・Promoting citizenship activities through systems for supporting employee volunteer activities
・A wide spectrum of activities, including social welfare, promotion of education and culture, and international contribution

NTT's approach to corporate citizenship

The NTT Group believes strongly in the concept of corporate citizenship, and is committed to working alongside members of the public for the betterment of society. To this end, all NTT Group company employees including temporary and contract employees, as well as partners and former NTT employees who endorse the NTT Group's CSR activities contribute to society as members of Team NTT.
Since the creation of its Social Contribution Committee in 1992, the NTT Group has been actively promoting citizenship activities, and continues to work to fulfill NTT's responsibilities in this area by providing support to Team NTT members who undertake citizenship activities in various fields.

The NTT Group's support system for employee volunteer activities

We support volunteer activities in a number of ways, in the belief that they not only contribute to the betterment of society, but also broaden the viewpoints of our employees and nurture consideration for others through promoting interest and involvement in society.
Our policy for the support of volunteers contributing to the resolution of societal issues focuses on three basic steps: (1) cultivation of a volunteer mindset through holding introductory courses and providing information on volunteer activities; (2) provision of opportunities for volunteer work through posting information on openings for volunteers on NTT's intranet and providing hands-on experience programs such as sign language classes; and (3) support for volunteers by introducing volunteer leave and other support programs and creating a company environment that facilitates volunteer work.

Cultivating a volunteer mindset
1. Education and raising awareness
2. Providing information

Providing opportunities for volunteer work
1. Providing information about openings for volunteers
2. Hands-on experience programs
3. Coordination of people wishing to become volunteers

Supporting volunteers
1. Creation of an environment that facilitates volunteer work
2. Introduction of various support programs
・Leave programs
・Sabbatical programs
・Award programs
・Volunteer gift program[1]
・Matching gift program[2]

1. Volunteer gift program
This program provides goods from the volunteer's company to facilities etc. where the volunteer has been active over a long period of time.
2. Matching gift program
Under this program, NTT Group companies support employees' fund-raising and charity activities by matching donations made by employees.

Team NTT citizenship activities

Team NTT members engage in a wide range of citizenship activities in areas such as social welfare, education and the arts, local community development and interaction, international exchange and contribution, nature conservation, and the promotion of sports and physical fitness.
Each year, NTT Group companies conduct "Operation Clean Environment" litter cleanup events with local community residents throughout Japan. In fiscal 2007, 66,075 volunteers made up of NTT employees and their families participated in litter clearance activities to clean and protect local environments. Group companies also contributed to local communities through participating in local events, and opening their doors to tours for children and workplace experience programs.

Participating in a local festival

Science study tour for children

"Operation Clean Environment" event

Citizenship activities of NTT Group companies in fiscal 2007

Category		Example	Summary	Company
Social welfare	Support for differently abled people	Distribution of "Please Call" notebooks	A communication tool for people with hearing or speech impairments and elderly people. When away from home, the notebook can be used to write down a telephone number, name, and a message asking a person nearby for assistance in making calls. (approx. 220,000 distributed so far)	NTT EAST NTT WEST
		Distribution of "Fureai Sokutatsubin" fax paper	Fax paper designed as a communication tool to make it easier for people with hearing or speech impairments to send faxes (approx. 165,000 pads distributed so far)	NTT EAST NTT WEST
		NTT mimi-Project (Ear-Project) activities	A working group consisting of NTT Group hearing impaired and other employees examine NTT Group products and services from the standpoint of hearing impaired people with the goal of improving customer service.	NTT EAST NTT COMWARE NTT CLARUTY
		Operation of Yu Yu Yu portal site for differently abled and elderly people	NTT CLARUTY operates Yu Yu Yu, a portal site that provides a full range of useful information services enabling differently abled and elderly people to carry out tasks such as finding information, creating documents, and publishing websites on their own.	NTT CLARUTY
		Provision of information on barrier-free facilities	NTT DoCoMo offers content for mobile phones and other devices providing information on barrier-free facilities in the Hokkaido, Kansai, Kyushu areas.	NTT DoCoMo
		Support for an NTT Group sign language circle	Activities of Heart Language, an NTT Group sign language circle, were supported by providing conference rooms etc.	NTT Advanced Technology
		Fundraising activities for the Japan Guide Dog Association on an OCN website	Online fundraising activities through the OCN Jolly website as part of activities to foster understanding of the need for guide dogs for people with visual impairments.	NTT Communications
	Support for children	Support for setting up Kodomo 110 no Mise and Kodomo 110 no Ie safe havens for children in shops and homes	Help was provided in establishing Kodomo 110 no Mise and Kodomo 110 no Ie (literally "Children's Emergency Services Shop" and "Children's Emergency Services House") locations to help prevent crime against children. When in danger, children can go to volunteers in the program for protection, after which police, schools, and parents are contacted.	NTT DoCoMo NTT LOGISCO
	Support for welfare organizations etc.	Donations of used PCs to welfare facilities	Used PCs were donated to local communities and non-profit groups, thus contributing to both society and the environment through recycling and reuse.	NTT Communications NTT COMWARE
		Cake sales	Cakes and other sweets made in welfare confectioneries staffed by differently abled people were sold in NTT offices on occasions such as Valentine's Day, White Day, and other events, and were also given as small parting gifts to participants at NTT DATA's general shareholder meeting.	NTT Communications NTT DATA
		Can pull tab collection	NTT EAST set up collection boxes to collect pull tabs which were then donated to volunteer groups to help purchase wheelchairs.	NTT EAST
		Support for orphanages	Children at orphanages were invited to amusement parks and baseball games, and also given presents paid for by proceeds from a Christmas bazaar and donations.	NTT DoCoMo
		Exchanges with facilities and workshops for people with intellectual disabilities	Items made in workshops by differently abled people were exhibited and sold at the company. A group of employees from NTT Yokosuka Research and Development Center also put on a "Fureai Concert" at a facility for people with intellectual disabilities.	NTT (Cyber Communications Laboratory Group)
		Employee donation activities	NTT DATA collected and donated items to volunteer organizations. Donated items included used stamps and prepaid cards, foreign coins left over from overseas trips, and unwanted CDs and calendars.	NTT DATA
Promotion of education and culture	Concerts	NHK Symphony Orchestra concerts, etc.	Under the concept "music is communication", NTT EAST and NTT WEST have sponsored a total of 184 NHK Symphony Orchestra concerts at venues throughout Japan since 1985 to provide people in all regions with the opportunity to enjoy quality music. People with hearing impairments were provided with Tokimeki bone sound conduction stereo headphones to enable them to enjoy the music.	NTT EAST NTT WEST
		NTT DATA Concert of Concerts	NTT DATA has held classical music concerts at Suntory Hall since 1996 to broaden communication with customers through arts and culture. The two concerts held in fiscal 2007 were attended by 3,000 members of the general public.	NTT DATA
		NTT Philharmonic Orchestra	The NTT Group has supported the NTT Philharmonic Orchestra since it was founded by NTT Group employees to contribute to the enhancement of NTT's creative corporate culture through music.	NTT Group companies
		DoCoMo Concerts	NTT DoCoMo stages free public concerts in Roppongi Hills.	NTT DoCoMo
		Sponsorship of the Tokyo Opera City Cultural Foundation	NTT Urban Development dispatched employees to the Tokyo Opera City Cultural Foundation and sponsored the Foundation's own concerts.	NTT Urban Development

Category		Example	Summary	Company
Promotion of education and culture	Concerts	Sponsorship of Viola Space	NTT FINANCE has since 1997 sponsored Viola Space, a viola festival proposed by internationally acclaimed musicians Nobuko Imai, Masao Kawasaki, and Mazumi Tanamura to contribute to the enrichment of society through the development of music culture.	NTT FINANCE
		Sponsorship of The Gaspar Cassado International Violoncello Competition in Hachioji	NTT AFTY was a sponsor of the world class Gaspar Cassado International Violoncello Competition held in Hachioji.	NTT AFTY
	Painting & Arts	Operation of NTT InterCommunication Center (ICC)	NTT EAST opened the NTT InterCommunication Center (ICC) in April 1997 in Tokyo Opera City in Nishi-Shinjuku, Tokyo, as a cultural facility for presenting ideas for the society of the future through promoting dialog between technology and the arts with a core theme of communication.	NTT EAST
		NTT DoCoMo Future Museum	Since 2002, NTT DoCoMo Future Museum creative drawing contests have been held to encourage children to present their dreams and visions of the future in a visual format.	NTT DoCoMo
	Cooperation in social education	Instructor dispatch to the e-Net Caravan program	NTT Group companies dispatched instructors to e-Net Caravan. Instructors in this program hold seminars that target mainly parents and teachers in an effort to raise awareness regarding safe and secure use of the Internet. e-Net Caravan is organized by the Ministry of Internal Affairs and Communications, and the Ministry of Education, Culture, Sports, Science and Technology together with the Telecommunications Carriers Association.	NTT Group companies
		Websites for children	Children's websites Super Media Kids and Communications World Adventure (both in Japanese only) were established to encourage children to have fun as they learn about communications media and develop ICT literacy.	NTT EAST NTT WEST
		Donation of used PCs and supplies to schools	Used PCs are donated to schools when computer systems are updated. Also, four times a year about 500 sheets of thick A3-sized paper used to divide products are donated to local elementary and child-care centers to be used as poster paper for art projects.	NTT EAST NTT LOGISCO
		Easy IT classes and other events for children	Classes and events such as Internet Basics, Summer Vacation IT Experience for Children, and Safe Mobile Phone Use are held to provide children with hands-on experience with IT and give parents and children opportunities for positive interaction.	NTT Communications NTT DATA NTT DoCoMo
		Workplace tours and hands-on learning experiences	NTT Group companies welcome study tours of local elementary and secondary school students, Japan Self-Defense Forces Academy students, community residents, and municipal government employees to provide opportunities to discover new technologies and experience research achievements and the coming age of ubiquitous communications.	NTT Group companies
		Accepting teachers for private sector training	NTT EAST cooperates with a program to provide teachers with opportunities to work and train in private companies to gain experience in corporate management and business activities.	NTT EAST
		Open lectures on cutting edge research achievements	The Cyber Communications Laboratory Group holds lectures that are open to the public to introduce cutting edge NTT technologies and encourage a deeper understanding and interest in science and technology.	NTT (Cyber Communications Laboratory Group)
		IT seminars (Science Camps) for high school students	The NTT Science and Core Technology Laboratory Group assisted in the Japan Science Foundation's Science Camp, an educational program for high school students. Over two days, 15 high school students toured company laboratory facilities, and participated in experiential seminars and group discussions.	NTT (Science and Core Technology Laboratory Group)
		Science field trips for local elementary and junior high school students	The NTT Information Sharing Laboratory Group builds children's interest in science through conducting field trips and lectures with the Institute of Electronics, Information and Communication Engineers to introduce communications technology history and the latest research and development.	NTT (Information Sharing Laboratory Group)
		NTT Core Technology Symposium open to the public	The NTT Cyber Communications Laboratory Group organized a symposium showcasing the latest technologies and stimulating discussion between researchers, technology professionals, and creators. The theme of the fourth Core Technology Symposium, held in fiscal 2007, was "The Next Generation Cyberspace Connecting Humans and Robots"	NTT (Cyber Communications Laboratory Group)
Local community development and interaction	Participation in community events	Participation in community events, festivals, and bazaars	NTT Group companies open their facilities to the public and participate actively in the festivals, bazaars, and other events of their respective communities.	NTT Group companies
		Participation in local public and private sector volunteer activities	Employees actively participated in community volunteer networks supporting local festivals and other events, for example by supporting a festival at a healthcare facility for the elderly and providing parking facilities.	NTT Advanced Technology NTT LOGISCO
		Helping municipalities to adopt advanced technologies	NTT AFTY participates in staging seminars and other activities aimed at helping local communities adopt advanced technologies.	NTT AFTY
	Recovery assistance	Disaster relief fund drives	NTT WEST organized a fund drive to aid disaster recovery efforts after the earthquake that occurred offshore of the Noto Peninsula.	NTT WEST
International exchange and contribution	Education	Foreign trainees	NTT EAST and NTT Cyber Communications Laboratory opened their doors to foreign trainees.	NTT (Cyber Communications Laboratory Group) NTT EAST
		Japan Overseas Cooperation Volunteers (JOCV)	Employees are dispatched to the Japan Overseas Cooperation Volunteers, organized by the Japan International Cooperation Agency (JICA). As of March 31, 2007, 8 employees were working as volunteers in various countries.	NTT EAST NTT WEST NTT DATA

Category		Example	Summary	Company
International exchange and contribution	Education	Support for building schools	NTT DoCoMo provided support for the construction of schools in Thailand in cooperation with the Asian Women & Children's Network (NGO). As of March 31, 2007, 9 schools had been completed.	NTT DoCoMo
	Emergency assistance	Toll-free phone service for refugees	NTT Communications supported the operation of a toll-free refugee hotline for the Japan Association for Refugees, an NPO that provides help to refugees staying in Japan.	NTT Communications
	Greening	Support for reforestation	NTT DoCoMo supported environmental protection activities in Northern Sumatra, Indonesia, through Conservation International (NGO).	NTT DoCoMo
		Support for Green Network	To cultivate employee environmental awareness through participation in tree planting activities, NTT COMWARE supported "Make the Desert Green!" NPO desert afforestation projects through donations and other activities.	NTT COMWARE
	Others	Fairtrade coffee	NTT Communications offers Fairtrade coffee in some of its cafeterias. Fairtrade products are made in developing countries and support sustainable lifestyle improvements for producers by offering them fair prices for their products on a continuing basis.	NTT Communications
Protecting the natural environment	Greening	DoCoMo Woods, reforestation and forestry volunteers	DoCoMo Woods are used to cultivate awareness of environmental protection and a volunteer mindset among employees and their families through woodland maintenance work that brings them into close contact with nature. These woodlands, which now cover 123 hectares in 32 locations including some overseas locations, are also used as venues for interaction with local communities. NTT DoCoMo plans to establish such woodlands in all 47 of Japan's prefectures by the year 2012.	NTT DoCoMo
	Litter cleanup	"Operation Clean Environment" litter cleanup events	NTT Group company employees work with organizations in their respective communities to clean nearby roads, parks, beaches, rivers, and mountains.	NTT Group companies
	Environmental education	Operation of Ecology Communication Plazas	NTT EAST offers venues for community-based environmental education activities, information dissemination, and other group gatherings.	NTT EAST
		Disseminating information on "Uchi Eco" eco-friendly lifestyle promotion and other environmental initiatives	NTT DoCoMo produces a pamphlet that provides examples, tips, recipes, and so forth for promoting "Uchi Eco" eco-friendly lifestyles. DoCoMo employees apply ideas from the pamphlet in their own homes to cultivate environmental awareness and practice "Uchi Eco" household-based environmental protection.	NTT DoCoMo
		Support for MIYAKE-ECO.NET, a website for dissemination of information on the nature of Miyake Island	NTT DATA has supported the recovery of Tokyo's Miyake-Jima, an island devastated by a volcanic eruption in 2000, by helping to build and operate the "MIYAKE-ECO.NET" website, which introduces the current state of Miyake's nature to people throughout Japan to foster nationwide support for the island's rehabilitation.	NTT DATA
		Sponsorship of an information website	NTT DATA sponsors Think Daily, a website that provides news, reports and other information about Earth-related topics.	NTT DATA
		Environmental leadership training	As part of its environmental education for employees, NTT DoCoMo provides an environmental leadership training program based on the Project WILD program promoted by the Ministry of Land, Infrastructure and Transport and the Ministry of the Environment. The program has been run six times to date, training a total of 174 environmental leaders.	NTT DoCoMo
		Nature experience classes	NTT DoCoMo held nature experience classes in its DoCoMo Woods for employees and their families to learn crafts such as birdhouse making and participate in talks on the environment.	NTT DoCoMo
Promoting sports	Popularization of sports	Sports workshops	NTT Group companies offer sports workshops to children in their communities. They also organize soccer tournaments, inviting professional J. League players and holding friendly matches. NTT baseball, softball, and track and field clubs also hold workshops for local children.	NTT (Science and Core Technology Laboratory Group), NTT EAST, NTT WEST, NTT DoCoMo
		Official sponsors of Omiya Ardija	NTT is a proud sponsor of Omiya Ardija, a professional soccer team in the Japanese professional J. League.	NTT Group companies
Others	Development of NPO activities	Mobile Communication Fund (MCF)	NTT DoCoMo established the NPO Mobile Communication Fund in 2002 as an organ for the advancement of information and communications and the betterment of society in the coming age of ubiquitous mobile communications through activities such as the award of prizes, provision of financial support to worthy organizations, and provision of scholarships to students in Asia.	NTT DoCoMo
	Others	NPO Plaza, an NPO information website	NTT Communications cooperated with the Japan NPO Center to create a website that allows users to search for NPOs in Japan. NTT Communications continues to assist in operating the site.	NTT Communications
		"goo" Pink Ribbon Campaign	A Pink Ribbon Campaign site has been set up on the "goo" Internet portal site to broaden awareness of the importance of early detection, examination, and treatment of breast cancer. Employee volunteers participate in Pink Ribbon events and donations from employees are given to the campaign. NTT Resonant has also conducted surveys on breast cancer awareness via the Internet.	NTT Resonant
		OCN Dot Phone Charity Dial	Phone users can call the OCN Dot Phone Charity Dial number from OCN Dot Phones and other 050 IP telephone services to donate to charities.	NTT Communications
		Volunteer activities by former employees	Many people who have retired from NTT Group companies volunteer their time in various ways, including helping to clean nursing homes and hospitals, acting as guides at local tourist or historic sites, and keeping local streets, parks, and beaches clean.	Former employees of NTT Group companies

In partnership with our customers, shareholders, investors, and other stakeholders

Communicating with our customers

The NTT Group showcases its vision to its customers for the future of communications at various exhibitions and events.
NTT Dream Kids Net Town 2006 was held in Tokyo and Sendai during July and August 2006. The event's intended audience of 4th through 6th grade students was fascinated to learn about the latest communications services and network structures. The event welcomed 940 visitors and lasted eight days, five days in Tokyo (July 26-30) and three days in Sendai (August 14-16).
NTT, together with NTT Communications and NTT DoCoMo, exhibited at ITU TELECOM WORLD 2006 held in Hong Kong (December 4-8). The exhibit highlighted the NTT Group's vision for a society equipped with ubiquitous broadband communications, and its efforts to contribute to the achievement of that vision in Asia and throughout the world.
The NTT R&D Forum (February 8-9, 2007) focused on the theme "Towards a Communication Future Focused on People and the Earth". The forum presented NTT's new R&D Vision along with the latest technologies that will transform business in the future and cutting edge technologies that anticipate telecommunications in ten to twenty years' time.

NTT Dream Kids Net Town 2006

Participants experienced the latest network services while learning about communications mechanisms as well as manners and rules for safe and secure communications use.

NTT R&D Forum

Nearly 100 exhibits attracted around 5,000 visitors in two days.

ITU TELECOM WORLD 2006

Showcased technologies included optical access systems, the latest third generation mobile communications services, and Aroma Communication Service, an aroma-emitting communication technology.

Communicating with our suppliers

To continue to provide customers with competitive, state-of-the-art services at reasonable prices, the NTT Group considers it essential to introduce cost-effective new technologies and products on a timely basis. To that end, it has become increasingly important for us to accurately identify customer needs, establish good partnerships with suppliers, and work closely with them to equip society with ubiquitous broadband communications.
Green procurement policies that encourage all relevant parties to consider the impact of procured products on the environment are also indispensable.
To build trust-based, open partnerships with our suppliers, we established and published our Basic Procurement Policy in 1999. (See Basic Procurement Policy on the right.)
For the benefit of suppliers, we also post procurement information on our website, and have procurement contact points in North America and Europe as well as in Japan for fielding inquiries and providing guidance on procurement.

Basic Procurement Policy
When procuring products, NTT will:
1. conduct its procurement in an open and transparent manner, taking into account its business needs;
2. provide non-discriminatory and competitive opportunities to both domestic and foreign suppliers; and
3. conduct global and market-driven procurement of competitive products that meet its business needs.
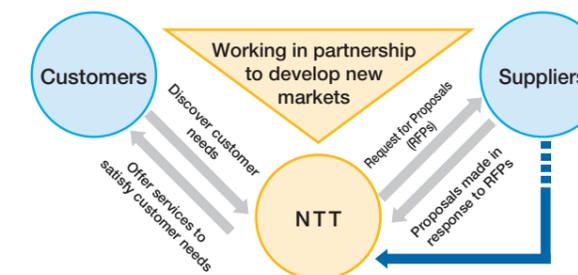
Website>>> http://www.ntt.co.jp/ontime/index-e.html
● Website for procurement information

In partnership with our customers, shareholders, investors, and other stakeholders
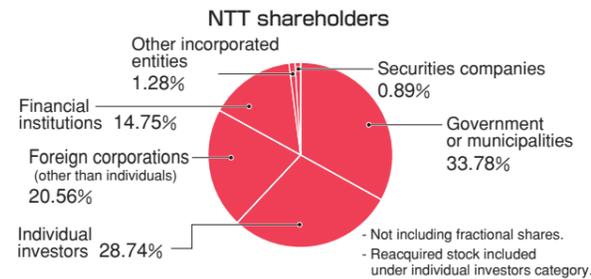
Communicating with our shareholders and investors

1. Basic philosophy

NTT recognizes that it is critically important to serve the best interests of its shareholders and other investors over the long term. The group as a whole has been making a concerted effort to enhance corporate value and make appropriate returns to shareholders. At the same time, we are striving to improve the transparency of management through appropriate disclosure and IR activities so that shareholders, investors, and other stakeholders can make correct evaluations of our business performance.

2. About NTT stock

NTT stock has, since privatization in 1985, gone through six offerings of government-owned shares, and as of the end of March 2007, is in the hands of approximately 1.45 million shareholders (including holders of fractional shares). We also instituted a repurchase of shares on September 6, 2005, at which time the government sold a part of its remaining stock, bringing its share down to only 33.78% and almost completely eliminating supply pressure (overhang) from government offerings. The chart below shows the breakdown of NTT shareholders as of the end of March 2007.

NTT shareholders

Other incorporated entities 1.28%
Securities companies 0.89%
Financial institutions 14.75%
Government or municipalities 33.78%
Foreign corporations (other than individuals) 20.56%
Individual investors 28.74%

- Not including fractional shares.
- Reacquired stock included under individual investors category.

3. Dividends

NTT determines the size of dividends based on overall business performance including dividend payout ratio as well as the company's overall financial conditions with the additional consideration on the stability and continuity of dividends. During fiscal 2007, NTT increased its yearly dividend from ¥6,000 to ¥8,000 per share, and dividends for fiscal 2008 are expected to rise to ¥9,000.

4. Disclosure and IR activities

NTT has listed its shares on several stock exchanges (Tokyo, Osaka, Nagoya, Fukuoka, Sapporo, New York, and London), and has issued domestic and foreign bonds to procure funds. NTT considers it extremely important to establish and maintain relationships of trust with its shareholders and investors in both domestic and foreign capital markets, and accordingly discloses information in a timely, appropriate and impartial manner, fulfilling its accountability as a business corporation and ensuring management transparency.

To help shareholders and investors to better understand its management strategy, NTT also actively conducts IR activities, and provides opportunities for direct communications between shareholders and top management of the company by holding various events in addition to general shareholders' meetings, including IR roadshows, corporate strategy briefings, financial results briefings, and presentations for investors in corporate bonds.

NTT is committed to impartial disclosure to shareholders, investors, and other stakeholders, and is enriching the content of its IR website in this respect. The site provides presentation materials and videos of various briefings in addition to financial results announcements, annual securities reports, and annual reports.

IR website
- Selected by Daiwa Investor Relations for an Internet IR Best Company Award for the 7th consecutive year

Annual report and "NTT is..." pamphlets for communication with shareholders

Topics

Socially Responsible Investment (SRI)

NTT has been rated highly by SRI evaluation organizations. It is listed on international SRI indexes such as the Ethibel Excellence Index and Ethibel Pioneer Index (Belgium) and FTSE4Good Global Index (UK), and also in Japan on

Morningstar Japan's SRI Index (as of September 1, 2007).

MS-SRI
Morningstar

Morningstar has created Japan's first ever SRI index based on the stock value of the top 150 companies listed on domestic stock exchanges that meet SRI criteria.

Website>>> http://www.ntt.co.jp/ir/index_e.html ● Shareholder and investor information

Third party opinion

Professor Hiroji Tanaka, a member of the ISO/SR Japanese Compliance Committee organized jointly by the Ministry of Economy, Trade and Industry and the Japanese Standards Association, provided the following opinion on the draft of this report from his perspective as an expert on corporate social responsibility.
We did our utmost to reflect his views in the final version of this report, and we plan to incorporate many more of his ideas in future activities and next year's report.

Third party opinion statement

Hiroji Tanaka

Guest researcher at
Rikkyo University
(College of Economics)
(Previously professor
at Rikkyo University
Graduate School)
Part-time lecturer at
Nihon University
Director of the Japan Society
for Business Ethics Study
Ministry of Economy,
Trade and Industry/
Japanese Standards
Association ISO/SR
Japanese Compliance
Committee member

The establishment of the NTT Group CSR Charter and concomitant consensus regarding CSR activities among group companies means that the NTT Group is now ready to promote specific initiatives. This marks the beginning of a new era for NTT, and one in which it will need to clarify principles and policies as well as create an organization for putting plans into action. In this sense, the existence of the CSR Charter, together with the creation of an organization for its implementation, is a welcome development that lends credence to CEO Miura's characterization of NTT as a customer-oriented enterprise, while at the same time creating anticipation for future achievements. It is an accomplishment worthy of admiration.

The NTT Group CSR Report 2007 provides a clear explanation of NTT's principles, policies, and organization for CSR as well as provides a glimpse into NTT's accomplishments during fiscal 2007, providing an easy-to-understand framework for each of the four CSR goals specified in the CSR Charter. It also directly addresses the issue of communication with stakeholders, which is a crucial element in the promotion of CSR activities. Compared with last year's report, this year we have a clear description of the aforementioned principles, policies, and organization as well as an easy-to-understand description of security and disaster prevention measures that affect the reliability and security of NTT Group services. The report also provides full coverage of issues critical to CSR activities, including a list of NTT's ongoing social contribution initiatives, and even touches on timely issues such as biodiversity. Many of the CSR reports issued these days are full of text and difficult to understand, but the editors of this report have clearly put a lot of effort, including the use of numerous easy-to-understand diagrams that clarify the meaning of the text, into enhancing its design and readability and other means.

If there were any particular area that might be improved, I might suggest that more concrete descriptions of quantitative targets and achievement levels for each CSR goal would help illustrate whether or not these activities are producing immediate results or should be reexamined for feasibility and effectiveness. In cases where numerical data is an effective means of reporting on a particular goal, the editors should provide as much data as possible. For example, rather than just showing raw data, I believe that more information in an easier-to-understand format about the cost effectiveness of environmental accounting would be an improvement. Another point worth reconsidering is the extensive use of technical terminology when discussing the research and development of cutting edge technology, as in the section on environmental technology development. Although it is nice that explanations of these terms are provided, it would be even nicer if the text were in ordinary language that does not require explanation.

The further development of NTT Group CSR activities requires careful consideration of and conformity with worldwide trends in GRI standards, and noting such trends in this report will help convey their importance to the general public as well as provide feedback to each NTT Group company. The complexities of corporate social responsibility span economic, environmental, and social issues, but I am certain that an awareness of these issues within each NTT Group company as well as by each and every NTT employee will lead to even greater success in these areas, both next year and beyond.

GRI index

Column 1

Item   GRI (Global Reporting Initiative) indicators （▶page no.）

1. Vision and strategy

| 1.1 | Statement of the organization's vision and strategy regarding its contribution to sustainable development | ▶ 2-3, 7-9 |
| 1.2 | Statement from the CEO (or equivalent senior manager) describing key elements of the report | ▶ 2-3 |

2. Profile

Organizational profile

2.1	Name of reporting organization	▶ Second cover, 4-6
2.2	Major products and/or services, including brands if appropriate	▶ 4-6
2.3	Operational structure of the organization	▶ 4-6
2.4	Description of major divisions, operating companies, subsidiaries, and joint ventures	▶ 4-6
2.5	Countries in which the organization's operations are located	▶ 5
2.6	Nature of ownership; legal form	▶ 4-5
2.7	Nature of markets served	▶ 5,7
2.8	Scale of the reporting organization	▶ 5-6
2.9	List of stakeholders, key attributes of each, and relationship to the reporting organization	▶ 8-9, 61-62

Report scope

2.10	Contact person(s) for the report, including e-mail and web addresses	▶ Second cover, back cover
2.11	Reporting period (e.g., fiscal/calendar year) for information provided	▶ Second cover
2.12	Date of most recent previous report (if any)	▶ Second cover
2.13	Boundaries of report and any specific limitations on the scope	▶ Second cover, 4-5
2.14	Significant changes in size, structure, ownership, or products/services that have occurred since the previous report	▶ -
2.15	Basis for reporting on joint ventures, partially owned subsidiaries, leased facilities, outsourced operations, and other situations that can significantly affect comparability from period to period and/or between reporting organizations	▶ -
2.16	Explanation of the nature and effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	▶ -

Report profile

2.17	Decisions not to apply GRI principles or protocols in the preparation of the report	▶ -
2.18	Criteria/definitions used in any accounting for economic, environmental, and social costs and benefits	▶ 30-31
2.19	Significant changes from previous years in the measurement methods applied to key economic, environmental, and social information	▶ 30-31
2.20	Policies and internal practices to enhance and provide assurance about the accuracy, completeness, and reliability that can be placed on the sustainability report	▶ Second cover, 9
2.21	Policy and current practice with regard to providing independent assurance for the full report	▶ -
2.22	Means by which report users can obtain additional information and reports about economic, environmental, and social aspects of the organization's activities, including facility-specific information (if available)	▶ Second cover, 6, 10, 12, 26, 39, 44, 51, 61-62

3. Governance structure and management systems

Structure and governance

3.1	Governance structure of the organization, including major committees under the board of directors that are responsible for setting strategy and for oversight of the organization	▶ 10
3.2	Percentage of the board of directors that are independent, non-executive directors	▶ 10
3.3	Process for determining the expertise board members need to guide the strategic direction of the organization, including issues related to environmental and social risks and opportunities	▶ -
3.4	Board-level processes for overseeing the organization's identification and management of economic, environmental, and social risks and opportunities	▶ 10, 29
3.5	Linkage between executive compensation and achievement of the organization's financial and non-financial goals	▶ -
3.6	Organizational structure and key individuals responsible for oversight, implementation, and audit of economic, environmental, social, and related policies	▶ 10-12, 29
3.7	Mission and values statements, internally developed codes of conduct or principles, and polices relevant to economic, environmental, and social performance and the status of implementation	▶ 8-9, 11, 28-29, 57
3.8	Mechanisms for shareholders to provide recommendations or direction to the board of directors	▶ -

Stakeholder engagement

3.9	Basis for identification and selection of major stakeholders	▶ 8-9, 61-62
3.10	Approaches to stakeholder consultation reported in terms of frequency of consultations by type and by stakeholder group	▶ 39, 48, 50, 61-63, 65
3.11	Type of information generated by stakeholder consultations	▶ 18-20, 39, 48, 50, 61-63, 65
3.12	Use of information resulting from stakeholder engagements	▶ 18-20, 50

Overarching policies and management systems

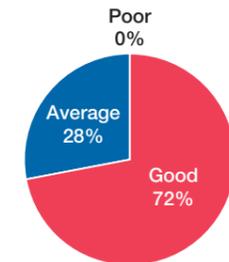| 3.13 | Explanation of whether and how the precautionary approach or principle is addressed by the organization | ▶ 28-29, 34-37, 40 |
3.14	Externally developed, voluntary economic, environmental, and social charters, sets of principles, or other initiatives to which the organization subscribes or which it endorses	▶ -
3.15	Principal memberships in industry and business associations, and/or national/international advocacy organizations	▶ 39
3.16	Policies and/or systems for managing upstream and downstream impacts	▶ 29, 34-37, 42-47, 52, 61
3.17	Reporting organization's approach to managing indirect economic, environmental, and social impacts resulting from its activities	▶ 13-20, 35, 48
3.18	Major decisions during the reporting period regarding the location of, or changes in, operations	▶ -
3.19	Programs and procedures pertaining to economic, environmental, and social performance	▶ 30-31
3.20	Status of certification pertaining to economic, environmental, and social management systems	▶ 47,50

Column 2

Item   GRI (Global Reporting Initiative) indicators （▶page no.）

4. GRI content index

| 4.1 | A table identifying location of each element of the GRI Report Content, by section and indicator | ▶ 64-65 |

■Economic performance indicators

Direct economic impacts

Customers

| EC1 | Net sales | ▶ 6 |
| EC2 | Geographic breakdown of markets | ▶ - |

Suppliers

| EC3 | Cost of all goods, materials, and services purchased | ▶ - |
| EC4 | Percentage of contracts that were paid in accordance with agreed terms, excluding agreed penalty arrangements | ▶ - |

Employees

| EC5 | Total payroll and benefits (including wages, pension, other benefits, and redundancy payments) broken down by country or region | ▶ - |

Providers of capital

| EC6 | Distributions to providers of capital broken down by interest on debt and borrowings, and dividends on all classes of shares, with any arrears of preferred dividends to be disclosed | ▶ 6, 62 |
| EC7 | Increase/decrease in retained earnings at end of period | ▶ - |

Public sector

EC8	Total sum of taxes of all types paid broken down by country	▶ -
EC9	Subsidies received broken down by country or region	▶ -
EC10	Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group	▶ -

■Environmental performance indicators

Materials

| EN1 | Total materials use other than water, by type | ▶ 32-33 |
| EN2 | Percentage of materials used that are wastes (processed or unprocessed) from sources external to the reporting organization | ▶ 32-33 |

Energy

| EN3 | Direct energy use segmented by primary source | ▶ 32-33 |
| EN4 | Indirect energy use | ▶ - |

Water

| EN5 | Total water use | ▶ 32-33 |

Biodiversity

| EN6 | Location and size of land owned, leased, or managed in biodiversity-rich habitats | ▶ - |
| EN7 | Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments | ▶ - |

Emissions, effluents, and waste

EN8	Greenhouse gas emissions	▶ 30-33
EN9	Use and emissions of ozone-depleting substances	▶ -
EN10	NOx, SOx, and other significant air emissions by type	▶ -
EN11	Total amount of waste by type and destination	▶ 30-33, 36
EN12	Significant discharges to water by type	▶ -
EN13	Significant spills of chemicals, oils, and fuels in terms of total number and total volume	▶ -

Products and services

| EN14 | Significant environmental impacts of principal products and services | ▶ 32-33 |
| EN15 | Percentage of the weight of products sold that is reclaimable at the end of the products' useful life and percentage that is actually reclaimed | ▶ 32-33 |

Compliance

| EN16 | Incidents of and fines for non-compliance with all applicable international declarations/conventions/treaties, and national, sub-national, regional, and local regulations associated with environmental issues | ▶ - |

Energy

| EN17 | Initiatives to use renewable energy sources and to increase energy efficiency | ▶ 34-35 |

Transport

| EN34 | Significant environmental impacts of transportation used for logistical purposes | ▶ 34 |

Overall

| EN35 | Total environmental expenditures by type | ▶ 30-31 |

■Social performance indicators

Labor practices and decent work

Employment

| LA1 | Breakdown of workforce, where possible, by region/country, status (employee/non-employee), employment type (full time/part time), and by employment contract (indefinite or permanent/fixed term or temporary) Also identify workforce retained in conjunction with other employers, segmented by region/country. | ▶ 5, 54 |
| LA2 | Net employment creation and average turnover segmented by region/country | ▶ - |

Labor/management relations

| LA3 | Percentage of employees represented by independent trade union organizations or other bona fide employee representatives broken down geographically OR percentage of employees covered by collective bargaining agreements broken down by region/country | ▶ - |
| LA4 | Policy and procedures involving information, consultation, and negotiation with employees over changes in the reporting organization's operations (e.g., restructuring) | ▶ - |

Health and safety

| LA5 | Practices on recording and notification of occupational accidents and diseases, and how they relate to the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases | ▶ 55 |
| LA6 | Description of formal joint health and safety committees comprising management and worker representatives and proportion of workforce covered by any such committees | ▶ - |

Column 3

Item   GRI (Global Reporting Initiative) indicators （▶page no.）

| LA7 | Standard injury, lost day, and absentee rates and number of work-related fatalities (including subcontracted workers) | ▶ - |
| LA8 | Description of policies or programs (for the workplace and beyond) on HIV/AIDS | ▶ - |

Training and education

| LA9 | Average hours of training per year per employee by category of employee | ▶ - |

Diversity and opportunity

| LA10 | Description of equal opportunity policies or programs, as well as monitoring systems to ensure compliance and results of monitoring | ▶ 11 |
| LA11 | Composition of senior management and corporate governance bodies (including the board of directors), including female/male ratio and other indicators of diversity as culturally appropriate | ▶ 54 |

Employment

| LA12 | Employee benefits beyond those legally mandated | ▶ 54-55 |

Training and education

| LA16 | Description of programs to support the continued employability of employees and to manage career endings | ▶ 55 |

Human rights

Strategy and management

HR1	Description of policies, guidelines, corporate structure, and procedures to deal with all aspects of human rights relevant to operations, including monitoring mechanisms and results	▶ 11, 56
HR2	Evidence of consideration of human rights impacts as part of investment and procurement decisions, including selection of suppliers/contractors	▶ -
HR3	Description of policies and procedures to evaluate and address human rights performance within the supply chain and contractors, including monitoring systems and results of monitoring	▶ -

Non-discrimination

| HR4 | Description of global policy and procedures/programs preventing all forms of discrimination in operations, including monitoring systems and results of monitoring | ▶ 11 |

Freedom of association and collective bargaining

| HR5 | Description of freedom of association policy and extent to which this policy is universally applied independent of local laws, as well as description of procedures/programs to address this issue | ▶ - |

Child labor

| HR6 | Description of policy excluding child labor as defined by the ILO Convention 138 and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring | ▶ - |

Forced and compulsory labor

| HR7 | Description of policy to prevent forced and compulsory labor and extent to which this policy is visibly stated and applied as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring | ▶ - |

Strategy and management

| HR8 | Employee training on policies and practices concerning all aspects of human rights relevant to operations | ▶ 11, 56 |

Disciplinary practices

| HR9 | Description of appeal practices, including, but not limited to, human rights issues | ▶ 11 |
| HR10 | Description of non-retaliation policy and effective, confidential employee grievance system (including, but not limited to, its impact on human rights) | ▶ 11 |

Society

Community

| SO1 | Description of policies to manage impacts on communities in areas affected by activities, as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring. | ▶ 57-60 |

Bribery and corruption

| SO2 | Description of the policy, procedures/management systems, and compliance mechanisms for organizations and employees addressing bribery and corruption | ▶ 11 |

Political contributions

| SO3 | Description of policy, procedures/management systems, and compliance mechanisms for managing political lobbying and contributions | ▶ - |

Community

| SO4 | Awards received relevant to social, ethical, and environmental performance | ▶ 62 |

Product responsibility

Customer health and safety

| PR1 | Description of policy for preserving customer health and safety during use of products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring | ▶ 46-49, 52 |

Products and services

| PR2 | Description of policy, procedures/management systems, and compliance mechanisms related to product information and labeling | ▶ - |

Respect for privacy

| PR3 | Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy | ▶ 47 |

Customer health and safety

| PR4 | Number and type of instances of non-compliance with regulations concerning customer health and safety, including the penalties and fines assessed for these breaches | ▶ 52 |
| PR6 | Voluntary code compliance, product labels or awards with respect to social and/or environmental responsibility that the reporter is qualified to use or has received | ▶ 33 |

Products and services

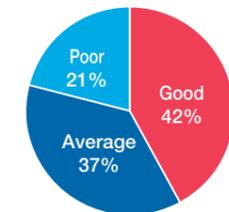| PR8 | Description of policy, procedures/management systems, and compliance mechanisms related to customer satisfaction, including results of surveys measuring customer satisfaction | ▶ 50 |

Reader feedback

We would like to thank all those who responded to our questionnaire regarding the NTT Group CSR Report 2006 issued last October. We received a number of invaluable comments from readers worldwide, both by post or fax, and via our website. We have done our best to incorporate your ideas into this year's CSR report, and will make use of them also in the planning and implementation of future CSR activities.
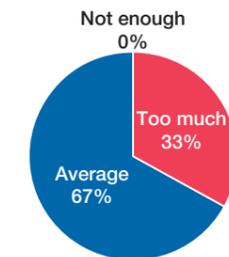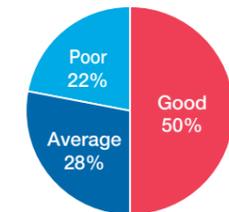
1. Overall

Poor 0%
Average 28%
Good 72%

2. Understandability

Poor 21%
Average 37%
Good 42%

3. Amount of information

Not enough 0%
Too much 33%
Average 67%

4. Readability (design, font size, graphs, etc.)

Poor 22%
Average 28%
Good 50%

Editor's note:

This NTT Group CSR Report 2007 has been issued in the hope of gaining understanding and endorsement of the NTT Group's numerous initiatives and activities undertaken in accordance with NTT policies for corporate social responsibility. We would especially like to thank the people at Matsushita Electric Industrial Co., Ltd. and Hitachi, Ltd. who graciously cooperated in the preparation of the material contained in this report, as did numerous others at both NTT Group and other companies. We would also like to thank Prof. Hiroji Tanaka and all those who were most generous in sharing their ideas and opinions regarding CSR. We thank you for your interest in the NTT Group's activities, and look forward to your continued patronage and support in the future.

NTT CSR Promotion Office   October 2007