

Accelerating our self-transformation to become Your Value Partner

Nippon Telegraph and Telephone Corporation
ANNUAL REPORT 2018

For the year ended March 31, 2018

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Strategy

Forward-Looking Statements

The forward-looking statements and projected figures concerning the future performance of NTT and its subsidiaries and affiliates contained or referred to in this report are based on a series of assumptions, projections, estimates, judgments, and beliefs of the management of NTT in light of information currently available to it regarding the economy, the telecommunications industry in Japan, and other factors. These projections and estimates may be affected by the future business operations of NTT and its subsidiaries and affiliates, the state of the economy in Japan and abroad, possible fluctuations in the securities markets, the pricing of services, the effects of competition, the performance of new products, services, and new businesses, changes to laws and regulations affecting the telecommunications industry in Japan and elsewhere, and other changes in circumstances that could cause actual results to differ materially from the forecasts contained or referred to in this report.

Editorial Policy

a sustainable society.

Accelerating our self-transformation to become **Your Value Partner**

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This is an integrated report that combines information that is important to shareholders and investors, including not only such information as growth strategies and financial results but also environmental (E), social (S), and governance (G) information. The report focuses on explanations of NTT Group's initiatives targeting increases in corporate value over the medium to long term. In editing this report, reference was made to the International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC). The report is intended to help readers better understand NTT Group, which is accelerating its self-transformation to become "Your Value Partner" and working to increase corporate value by contributing to the realization of

Other Materials

- Presentation Materials
- http://www.ntt.co.jp/ir/library_e/presentation/
- Shareholders' Meeting Materials http://www.ntt.co.jp/ir/shares_e/shareholders_meetings.html
- Financial Results http://www.ntt.co.jp/ir/library_e/results/
- Securities Report http://www.ntt.co.jp/ir/library_e/yuho/
- Sustainability Report http://www.ntt.co.jp/csr_e/report.html

September 2018 Jun Sawada President and Chief Executive Officer ative Member of the Board

NTT Group is accelerating its self-transformation to become "Your Value Partner" based on its Shared Values of "Connect," "Trust," and "Integrity." My name is Jun Sawada, and it is a pleasure to introduce myself. I have succeeded Hiroo Unoura as the president and chief executive officer of NTT.

I am committed to helping NTT Group contribute to the creation of a prosperous society through the acceleration of its self-transformation to become "Your Value Partner" and the provision of reliability and impeccable quality services to customers, shareholders, partners, and local communities.

Leading by Example, Performance Tracking, and Speed decision-making and action can heighten organizational I joined Nippon Telegraph and Telephone Public Corporation capacities. Though my position as president of the holding roughly 40 years ago. In the years that followed, I was largely company has taken me away from the front lines, this has involved in research and development, taking part in designnot changed the importance I place on frontline operations. ing the structures of telephone poles and manholes. Later, In this position, I will track performance based on quantita-I became the manager of a telephone exchange where I was tive results while fostering work habits that instill a fundaresponsible for performing facility maintenance and interacting mental element of speed into the organization as I lead the with customers on the front lines of operations. The majority transformation of NTT Group by example. of the other employees at that exchange had been situated longer than I was. This experience made me painfully aware Mission of Acting Simultaneously as a Public Utility and of the difficultly of leading an organization. In this position, a Private Company Some may say that NTT Group, with its long history and I tried to always lead by example. At the same time, I took massive scale, cannot change. While there is some truth steps to track the performance of our organization from various perspectives. Whether it be the number of telephone to this statement, it is not completely accurate. poles installed, the length of cables laid, or the number of The privatization of Nippon Telegraph and Telephone customers at which installations were performed, I would Public Corporation in 1985 led to the formation of track these metrics and compare them with figures from other organizations. I thereby aimed to foster employee ambition and drive transformation. many organizations requiring a unique approach toward

In 2000, I transferred to NTT Communications Corporation. During the period when I served as executive manager of the Corporate Strategy Planning Department, I was involved in over 10 M&As, many of which were for overseas companies. It was in 2014 when I became a Representative Member of the Board of the Company. Later, I held a concurrent position as the president of NTT Security Corporation, where I spearheaded the integration of the Group's cybersecurity companies. Over the years, I have held many concurrent titles at various companies. Faced with limited time to fulfill my duties in concurrent positions, I naturally came to emphasize speed in my work. Today, I consider management as adhering to the formula of mass (m) × acceleration (a) = force (F). As illustrated by this formula, swift

NIPPON TELEGRAPH AND TELEPHONE CORPORATION and NTT Group. At this time, the Group joined the ranks of management to act simultaneously as a public utility and as a private company, two hats that are said to be difficult to wear at once. Important tasks needing to be addressed include the ongoing provision of reliable communications infrastructure, the installation of communications infrastructure in underpopulated areas and on isolated islands, and effective responses to natural disasters. If there is anyone in Japan that is going to address these tasks, it should be NTT Group. In fact, we see this as our mission. This pride in our role as a public utility and our commitment to fulfilling this role are aspects of NTT that cannot change. This is the reason why I see the very act of management as being a CSR activity for NTT Group. At the same time, so long as we are a private company, we will also be obligated to continue

generating profits. Fulfilling this obligation is also critical to our ability to function as a public utility. This obligation necessitates ongoing change.

In truth, the business structure of NTT Group has changed greatly over the years. At the time of our privatization in 1985, voice related revenues accounted for more than 80% of our operating revenues. In the fiscal year ended March 31, 2018, however, less than 20% of operating revenues came from voice related revenues. The main sources of our revenue today are IP / packet communications services and system integration services, which generated more than 60% of operating revenues in the fiscal year under review. In addition, overseas sales were 10 times higher in the fiscal year under review than in the fiscal year ended March 31, 2009. This change was a result of our focus on expanding overseas sales through M&As and organic growth that followed from our positioning global cloud services as the cornerstone of our business in the "Towards the Next Stage" Medium-Term Management Strategy, announced in November 2012. In February 2015, we launched the Hikari Collaboration Model, the world's first model for full-scale fiber-access services offered through a wholesale framework. These services represented a massive change as they were indicative of a shift in our business model, from supplying network services directly to customers to supporting customers in creating new businesses as an enabler. Under the "Towards the Next Stage 2.0" Medium-Term Management Strategy, which was launched in May 2015, we have been expanding our collaborative efforts with various partners as we evolve the Hikari Collaboration Model into a B2B2X model.

We have also been faithful in fulfilling our obligations to our shareholders. Since 1999, we have conducted more than ¥3 trillion in share buybacks on an aggregate basis. In addition, we are planning to raise dividend payments for the eighth consecutive year, and the targeted per share dividend payment is 6.8 times higher than in the fiscal year ended March 31, 2004.

Society expects NTT Group to support social infrastructure and to help resolve social issues. It was the process of self-transformation with the goal of living up to these expectations-during which we have always been mindful of the future social changes predicted from a long-term perspective-that has enabled us to continue evolving up until today. In other words, it is our aforementioned management approach of acting simultaneously as a public utility and a private company that has driven ongoing improvements in our corporate value thus far and that will continue to do so in the future.

Vision of Being "Your Value Partner"

I would next like to talk about the social changes we project in the future and the expectations that society will likely place on NTT Group in light of such changes. In recent years, it seems that we have entered a new stage of technological progress with someone predicting end of Moore's law. There is a rising sense of anticipation for the resolution of social challenges through the advance of so-called digital transformations, which entail utilizing revolutionary digital technologies, such as those pertaining to the Internet of Things, big data, and artificial intelligence. The information communications sector is also expected to undergo massive changes. For example, NTT DOCOMO plans to begin providing commercial services based on fifth-generation (5G) communication standards in Japan in 2020. In addition, the year of 2020 will see major events, most notably the Tokyo 2020 Olympic and Paralympic Games.

I suspect that these trends will result in NTT Group coming to be expected to address a diverse range of social issues by creating new businesses and industries through collaboration with an even broader spectrum of partners. I have no doubt in the ability of NTT Group to live up to these expectations due to its polyhedron, which is a product of its various connections with society and people in an exceptionally wide assortment of business fields. To accomplish

this goal, we are working toward our vision of becoming business entities requires that we win trust, and trust must "Your Value Partner" by offering value to and being chosen be earned by always maintaining a sense of integrity. These by customers, shareholders, local communities, employees, three Shared Values contribute to and enhance one another. and all of our other stakeholders. Our Shared Values are also a factor differentiating NTT Upon assuming the position of president, I sought to Group from its competitors that informs how we position explain "Your Value Partner," our vision for the future, in an ourselves and the direction of our management strategies.

easy-to-understand manner to our approximately 300,000 employees working in about 90 countries and regions around the world. We defined "Service Expertise," "Technical

The position of NTT Group in the domestic market could be Expertise," and "Intelligence" as the qualities we look for in described as "neutral." Our role is to connect various comour employees, who will be integral to the realization of this panies from a neutral standpoint, not bound by any particular capital relationship. The foundation for these efforts is vision. Meanwhile, our Shared Values were defined as "Connect," "Trust," and "Integrity," concepts that represent formed by the trust we have cultivated over our years of the very DNA of NTT. operation. It is from this distinctive position that NTT Group At NTT, we hope to contribute to the realization of a smart is developing its B2B2X model and supporting its customer society characterized by various connections that give rise digital transformations. We are leveraging the advantages to such innovations as connected cars, connected value of this position of neutrality to engage in an increasingly chains, and connected industries. Connecting diverse wide range of collaborative initiatives. For example, we are



Support Our Customers' Digital Transformations





working together with partners in fields such as sports, transportation, logistics, and manufacturing; taking part in numerous verification tests; and advancing the 2020 \times Regional Revitalization Project, which is aimed at providing solutions to various challenges that local governments and businesses face.

NTT Group also aims to develop new services that respond to various needs in light of changes such as the emergence of cognitive networks, which are taking advantage of the platform provided by sophisticated 5G connections, as well as the trend toward software-based telecommunications businesses. Meanwhile, our policy for serving individual customers is to provide personalized services that support changes in their lifestyles.

Overseas, we must compete with powerful rivals, such as consulting firms, in all areas of operations. NTT Group is unique in its ability to comprehensively provide services spanning from global IP backbones and data centers that are of world-class scale and quality to consulting, application, and network integration services. Leveraging this strength, we aim to function as an enabler, as we do in Japan, to support our overseas customers' digital transformations.

The joint smart city verification test we are carrying out in Las Vegas is a prime example of this approach. The solution being tested is designed to contribute to public safety by installing sensors in urban areas and event sites that monitor crowds and transportation conditions and detect emergency situations, which makes it possible to predict and analyze incidents that are highly likely to be of a criminal nature (see "Special Feature: Next-Generation Smart City Initiatives" on page 24 for details).

Self-Transformation to Continue Being Chosen by Customers

If NTT Group wants to continue to be evaluated to have value and to be chosen by customers, it will need to keep transforming. For this reason, improving the profitability of global businesses has been positioned as a matter of top importance. We will pursue this goal by boosting competitiveness through improvements to the value of our products and services.

Overseas, we are seeking out those processes from among the unique product development, sales, and other business processes of specific companies that can be replaced with standardized processes. By integrating these processes, we will endeavor to provide high-value-added services and boost cost efficiency. The combination of the cloud capabilities of NTT Communications and Dimension Data completed in March 2018 is one facet of these efforts. Other initiatives include the establishment of NTT Venture Capital, L.P., through which we will step up investment in technological fields expected to see growth in the global market, and the intensification of our R&D activities in the global market.

In Japan, we must accept the fact that the growth of our traditional telecommunications business with be peaking in the future. At the same time, digital technologies are transforming existing industries and social structures are changing domestically due to trends such as the aging population, declining birth rate, and shrinking workforce. To address these changes, we are utilizing the various data gained through NTT Group's business activities to undertake our own digital transformation by boosting efficiency via work process monitoring and accelerating the development of new high-value-added services. To facilitate this undertaking, I equipped chief digital officers (CDOs) at major operating companies in August 2018. Going forward, the CDO of each company will be responsible for formulating and implementing digital strategies for addressing various operating environment changes.

Diversity and Inclusion That Are Critical to Global Management

I would now like to discuss aspects of global businesses that I place particular emphasis on.

I am convinced that diversity and inclusion are critical to global management. It was when I held a concurrent position as president of NTT Security that I truly developed a fundamental understanding of diversity and inclusion.

NTT Security is an intermediate holding company that oversees regional companies in the United States, Europe, Asia, and Japan that were established by acquiring five companies and extracting only the wholesale portion of the security operations. As such, its organization staffs 1,500 employees, more than 90% of whom are non-Japanese individuals gathered from 15 different countries. Although these employees recognized the importance of diversity. this acceptance was limited to words. Very few people were actually accepting toward the idea of people from other countries. For example, the belief that Japanese quality can lead to success in the global market-which is held so firmly by Japanese people-was just seen as overcompensating by those from other countries and regions. It is indeed true that our employees all had differing religions. cultures, and convictions, each believing that the ideas of their country were correct. I thus came to realize that treating "inclusion" as having the same meaning as "globalism" and imposing a specific set of values on these employees was the wrong approach.

The differences between regions were even more striking when viewed in terms of market trends. Around 70% to 80% of the basic designs and parts used in automobiles are standard across the globe, with the remaining 20% to 30% being adjusted to match specific market requirements, such as those pertaining to exhaust gas regulations. When it comes to IT services, however, there is almost nothing that is standardized. Rather, I see a need to make fine-tuned adjustments to services based on the level of social development of a specific country or region, its systems, and its market and economic structures. This view led me to realize that the most fundamental aspect of inclusion is recognizing that there is no such thing as true globalism. We should therefore look to shape 80% of our operations based on local characteristics while basing the remainder on global

conditions. At NTT Security, this recognition was reflected in the ratio of local to global authority. Previously, this ratio was 6:4, but this was changed to 8:2, greatly increasing the amount of authority delegated to local employees and contributing to smooth management. We also acknowledged that our Shared Values serve as the common point of understanding, the inclusive commitment, needed for functional teamwork.

In fall 2018, we will establish a global holding company (intermediate holding company) under NTT, to which control of NTT Communications, Dimension Data, NTT DATA, NTT Security, and NTT Innovation Institute will be transferred. An important aspect of management at the global holding company will be its participatory approach toward business operations in which the presidents of the operating companies it oversees, including non-Japanese managers, serve concurrently as directors of the global holding company. We will also delegate a great deal of authority and responsibility to the global holding company in order to allow managers who are well acquainted with the global market to carry out management based on their own ideas. This situation will result in managers who were previously only responsible for the interests of their own company being charged with responsibility for pursuing overall optimization as directors of the global holding company. I anticipate that this newfound responsibility will encourage more intimate coordination between Group companies.

We are also examining the possibility of integrating the operations of NTT Communications, Dimension Data, NTT Security, and NTT Innovation Institute into domestic and overseas units, with the tentative schedule calling for this integration to occur in summer 2019. NTT DATA will retain its listed status and its own brand, but will be expected to step up coordination with other Group companies.

Contribution to a Better Society with the Power of NTT Group

NTT Group has an asset portfolio worth over ¥20 trillion, which includes more than 7,300 telephone exchanges and communications networks spread across Japan. I see potential for us to generate greater value by further leveraging these assets. I also want us to create new value and contribute to society by utilizing our many talented people and our R&D capabilities.

One facet of our efforts to make such contributions was the establishment of TNcross Corp., a joint venture with Tokyo Electric Power Company Holdings, Inc. This company installs high-voltage, direct current systems at communications buildings and utilizes storage batteries to create new, high-efficiency energy services.

NTT Group consumes around 1% of all the electricity used in Japan. The sharp increase in data traffic seen in recent years has made improving energy efficiency even more important. For this reason, we have set the goals of doubling the energy efficiency of our telecommunications business and reducing power consumption by 10% leading up to 2025. NTT Group is also transitioning to electric vehicles (EVs) for its corporate fleet, and we have defined the goal of converting 50% of our fleet of general domestic corporate vehicles to EVs. Furthermore, the Group is in the process of preparing to join the EP100 and EV100 international initiatives pertaining to energy productivity and EVs, respectively.

However, we will not limit ourselves to environmental initiatives. Rather, we will incorporate social and governance perspectives to practice ESG management with the aim of contributing to the accomplishment of the United Nations Sustainable Development Goals.

New Medium-Term Management Strategies

In the fiscal year ended March 31, 2018, NTT Group broke records for operating revenues, operating income, and net income. In addition, we were able to achieve the mediumterm financial targets of "Towards the Next Stage 2.0" with regard to earnings per share (EPS) growth, streamlining capital investment in our domestic network business, and cost reductions in fixed-line and mobile access networks. The only financial targets yet to be accomplished are those for overseas sales and operating income, but we are advancing initiatives with the goal of accomplishing these targets as quickly as possible.

The new medium-term management strategies is scheduled to be announced in November 2018. In this strategy, we plan to define targets and measures from short-, medium-, and long-term perspectives of three, five, and seven years (see "Outline of New Medium-Term Management Strategies" on page 22 for details).



Fundamental Shift in Thinking to Drive New Value Creation

The pace of technological progress in recent years has been astounding. Unfortunately, in the midst of this progress, NTT Group has failed to create any truly world-changing technologies.

We have created telephony services that allow anyone to personally connect with other people. However, the current landscape is one in which communication is taking a community-like form, with the number of people one seeks to connect with usually being less than 100. This trend is most exemplified by social media services. Despite this landscape, our design philosophies are all rooted in telephony. There is much that we need to do in order to raise our value.

It is therefore crucial that we do not allow ourselves to become complacent with our existing businesses. Rather, we must undertake a fundamental shift in thinking to drive the creation of new value. I spoke of how NTT has a polyhedron. I believe that we need to utilize this characteristic to exert an outward propulsion and step into new fields that lie outside of the domains of our existing businesses.

NTT Group seeks to undergo self-transformation to become "Your Value Partner." In advancing this transformation, I will tackle all challenges placed before us as we seek to continuously raise the corporate value of NTT Group through contributions to the Japanese and global societies.

(Fiscal years ended March 31) 1052

Establishment of Nippon Telegraph and Telephone Public Corporation

The telegraph and telephone business operated by the Ministry of Communications and the Ministry of Telecommunications was transferred to Nippon Telegraph and Telephone Public Corporation in 1952. At that time, Japan was still recovering in the aftermath of World War II, its infrastructure was in disarray, and its technologies were lagging behind other countries

Nippon Telegraph and Telephone Public Corporation engaged in various initiatives for addressing people's need for quick telephone connections.

1985

Privatization of NTT Group

(Establishment of Nippon Telegraph and Telephone Corporation)

In conjunction with the deregulation of telecommunications services, Nippon Telegraph and Telephone Public Corporation was privatized to form Nippon Telegraph and Telephone Corporation, which came to be referred to as "NTT."

After this privatization, NTT Group expanded with the establishment of Group companies NTT DATA in 1988, NTT DOCOMO in 1991, NTT FACILITIES in 1992, and NTT COMWARE in 1997.

1988

Launch of World's First Commercial ISDN Service

Release of OCN Internet Access Services

We began providing Open Computer Network (OCN) services in preparation for the spread of the Internet. OCN Economy, one of the offerings in this lineup, delivered constant connection speeds of 128 kbps at exceptionally affordable monthly rates for the time, enabling use of this service to spread among companies of all sizes and even to individual users

1009

Start of Provision of i-mode The *i-mode* service, which allowed for e-mail or web browsing to be performed via the Internet through mobile phones, was launched, making Internet services previously only available on computers accessible on mobile phones. Many users embraced this service, leading to a peak user number of 49 million (fiscal year ended March 31, 2010).

1999

Transition to Holding Company Structure

NTT Group transitioned to a holding company structure, and NTT East, NTT West, and NTT Communications were established.

Commencement of Fixed-Rate ISDN Communication Service

Launch of Household Optical Fiber Services

After announcing the launch of the B FLET'S optical fiber service. we moved ahead with the full-fledged rollout of high-speed, large-capacity telecommunications services.

2004

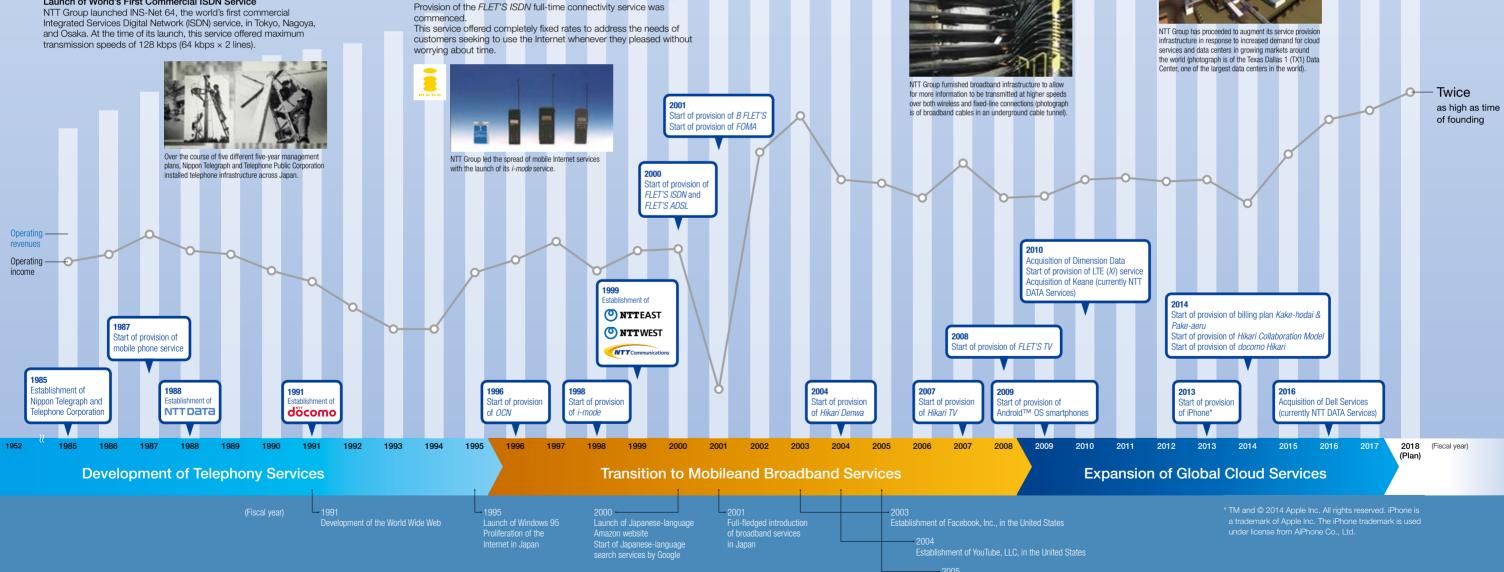
Announcement of Osaifu-Keitai As part of a drive to make mobile phones a more integral part of our daily lives, NTT announced the Osaifu-Keitai (e-wallet), Japan's first Felica-compatible mobile phone. Osaifu-Keitai enabled customers to use their mobile phones in place of their wallets, a necessary tool in our daily lives, by functioning as a payment method, membership cards, and even coupons. Osaifu-Keitai is a registered trademark of NTT DOCOMO.

200 Start of Provision of Hikari TV Service

We started providing *Hikari TV*, a video distribution service for FLET'S Hikari-compatible TVs.

2008

Commencement of Cloud Services NTT commenced BizCITY for SaaS Provider, its first cloud service.





— Twice

2010

Acquisition of Dimension Data and Keane

With operations in Asia, Europe, and the United States developed as part of the overseas business launched in the 1990s, NTT Group acquired Dimension Data and Keane (currently NTT DATA Services) in 2010. These acquisitions poised the Group to provide comprehensive ICT services in Australia, South America, Africa, the Near and Middle East, and other parts of the world.

Today, we serve more than 10,000 companies in more than 190 countries.

2015

Announcement of "Towards the Next Stage 2.0" Medium-Term Management Strategy

In May 2015, NTT Group announced the newly formulated "Towards the Next Stage 2.0" Medium-Term Management Strategy to accelerate the initiatives of the prior "Towards the Next Stage" Medium-Term Management Strategy, which was announced in November 2012



as high as time of founding

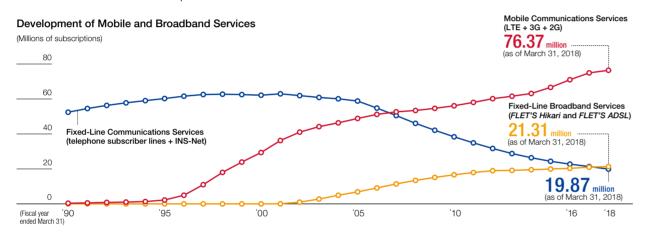
Path of NTT Group's Self-Transformation

With a constant eve to the future, NTT Group undergoes dynamic self-transformation to maintain its standing as a partner supporting industry and society. Customer input is the guiding force behind our activities, constantly propelling us forward to support the transformations of customers with our accumulated experience and cutting-edge technologies in our quest to create a better society. We commit ourselves to shaping a more fulfilling future for Japan and the world founded on reliability and innovation.

Historic Transformations

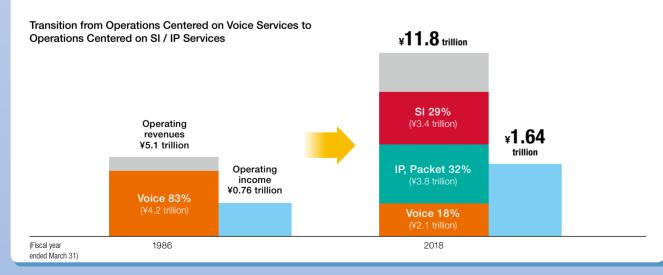
Transition from Telephones to Broadband and Mobile Services

- Contracts for fixed-line communications service contracts peaked at 63 million on March 31, 1998, declining thereafter to reach 19.87 million on March 31, 2018, due in part to the spread of mobile communications services
- Fixed-line broadband service contracts stood at 21.31 million on March 31, 2018, following steady growth each year since the launch of household optical fiber services in 2001



Change in Earnings Structure Focus from Voice to System Integration and IP

- Earnings initially consisted of mainly telephony services (voice revenues) after privatization
- Earnings now consist of mainly system integration and IP services revenues due to transformation of business structure in line with market changes

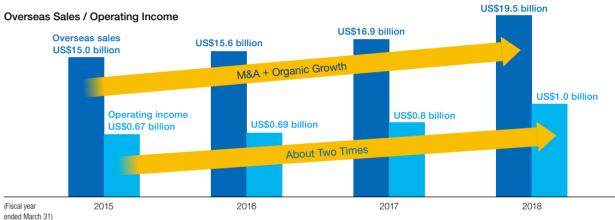


Future Transformations

Shift in Focus from Domestic to Global Businesses

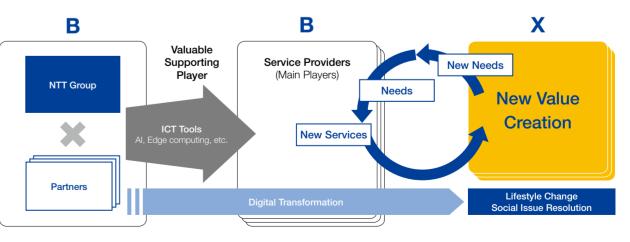
- contributing to steady growth in operating revenues and operating income

Overseas Sales / Operating Income



Reversal in Role from Main Player to Catalyst for Service Providers Falling under the Second B

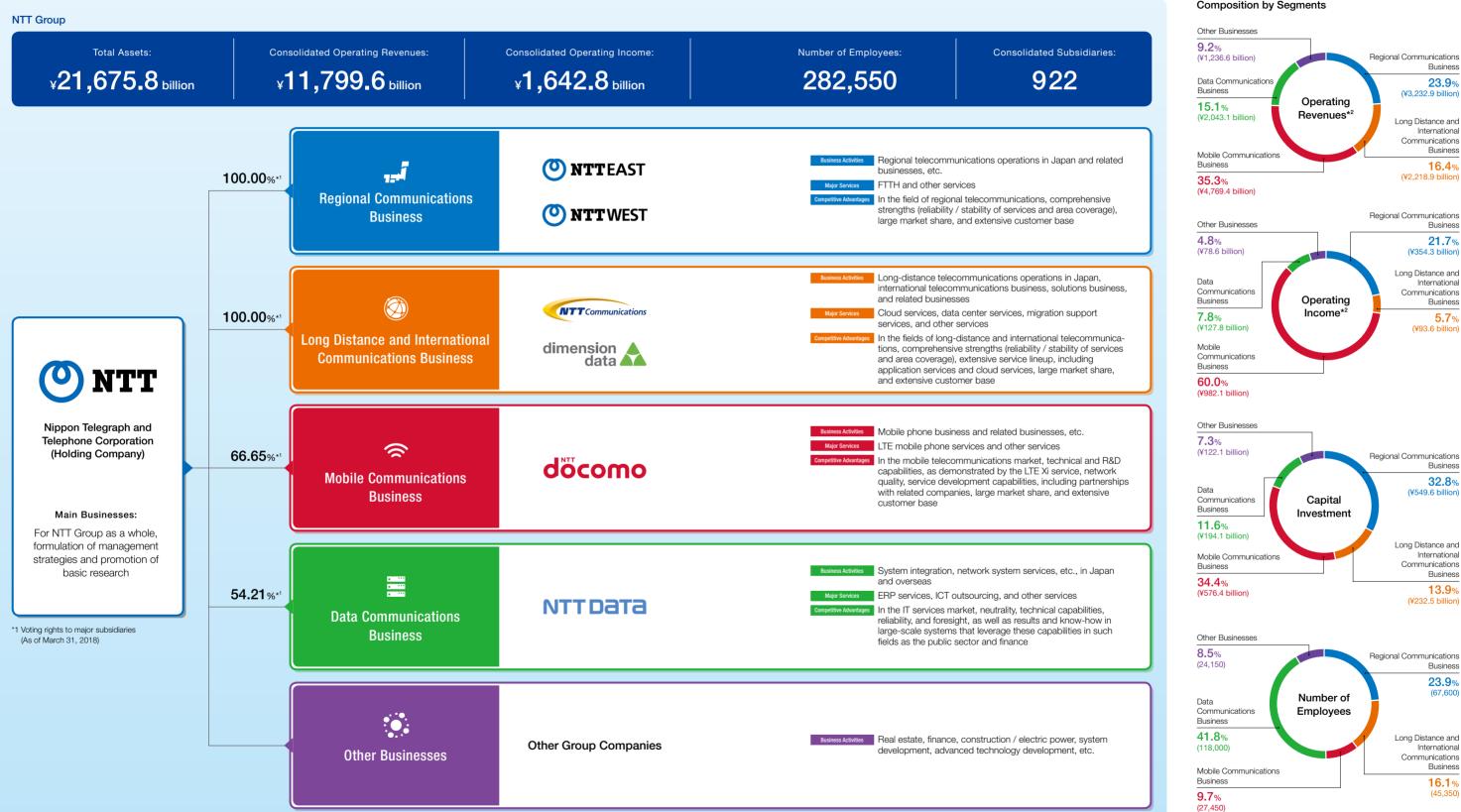
- For the acceleration of new value creation, NTT Group drives collaboration with various service providers
- supporting player



• Enhancement of service provision capabilities of Group companies and coordinated up-selling and cross-selling efforts

• Further enhancement of Groupwide service provision capabilities to boost competitiveness and profitability in global market

· Contribute to service providers' digital transformations for lifestyle change and social issue resolution as a valuable



Composition by Segments

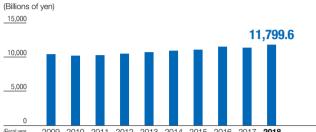
*2 Percentage of simple sum of all segments (including intersegment transactions

Performance Highlights

NTT Group has applied International Financial Reporting Standards (IFRS) beginning with the three months ended June 30, 2018. All figures contained on pages 16 and 17 are based on U.S. GAAP. Please refer to "Financial Summary" on page 86 for detailed performance figures by fiscal year.

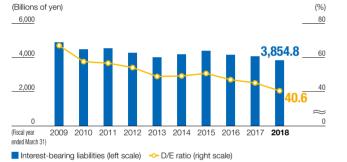
Financial Data





(Fiscal year 2009 2010 2011 2012 2015 2016 2017 2018 ended March 31

Interest-Bearing Liabilities / D/E Ratio*1



*1 D/E ratio = Interest-bearing liabilities / Shareholders' equity x 100

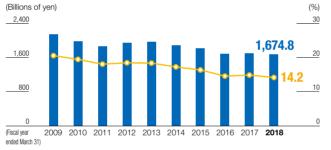
*2 Capital investment is recognized on an accrual basis for the acquisition of property, plant and equipment. *3 Capex to sales ratio = Capital investment / Operating revenues x 100

Operating Income / Net Income Attributable to NTT



Operating income Net income attributable to NTT

Capital Investment*2 / Capex to Sales Ratio*3

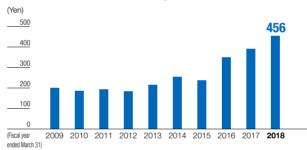


Capital investment (left scale) -- Capex to sales ratio (right scale)

Depreciation and Amortization (Billions of yen) 2,400 1,600 800

(Fiscal year 2009 2010 2011 2012 2013 2016 2017 2018 ended March 31

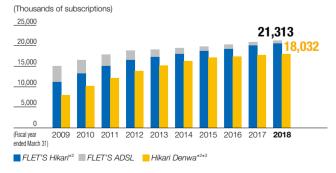
Net Income Attributable to NTT per Share*5



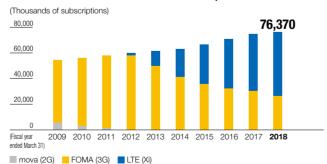
*4 From the fiscal year ended March 31, 2017, the method for calculating EBITDA has been revised. EBITDA = Operating income + Depreciation and amortization + Loss on sales of property, plant and equipment + Impairment loss *5 Adjusted for a stock split of common stock (100-for-1) with an effective date of January 4, 2009, and a stock split of common stock (2-for-1) with an effective date of July 1, 2015.

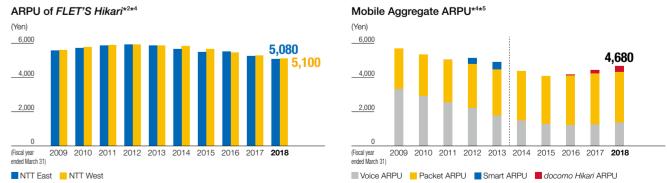
Operational Data

Fixed-Line Broadband Services Subscriptions*1



Mobile Communications Services Subscriptions*1





*4 Please see page 89 for the ARPU calculation method and other details.

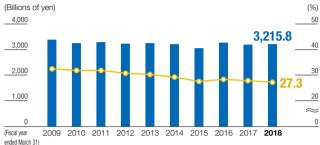
*5 The ARPU calculation method was changed from the fiscal year ended March 31, 2016. Accompanying this change, the new method has been applied retroactively to the ARPU figures for the fiscal year ended March 31, 2014, and the fiscal year ended March 31, 2015. Packet ARPU from the fiscal year ended March 31, 2009, to the fiscal year ended March 31, 2011, includes an amount corresponding to Smart ARPU.

*1 As of each fiscal year-end

*2 The figures for FLET'S Hikari and Hikari Denwa include wholesale services provided to service providers by NTT East and NTT West.

*3 The number of Hikari Denwa subscriptions is calculated by number of channels in thousands.





EBITDA (left scale) --- EBITDA margin (right scale)

Ratings



Environmental / Social Data

Environmental Data					
Fiscal year ended March 31	2014				2018
CO ₂ emissions volume ^{*1} (Million tons of CO ₂)	4.86	5.08	4.89	4.59	4.39
Contribution to reduction in society's CO2 emissions*2*3					
(Times, compared with CO2 emissions from NTT Group)	Calculated from the	ne fiscal year ende	ed March 31, 2017	8.9	10.1
Electrical efficiency of communications services* ^{2*4} (Times, improvement from the fiscal year ended March 31, 2014)	Calculated from th	ne fiscal year ende	ed March 31, 2017	2.7	3.6
Final disposal rate for waste (%)	1.15	0.88	0.82	1.03	1.18

*1 Total for Scope 1 (direct emissions from the use of fuel, etc.) and Scope 2 (indirect emissions accompanying the use of energy, such as electricity)

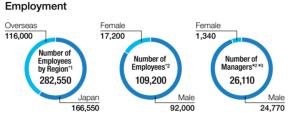
*2 Performance in comparison with 2030 environmental targets

*3 Calculated by converting the energy-saving benefits of supplied ICT services into CO2 *4 Calculated for five major domestic companies (NTT East, NTT West, NTT Communications, NTT DOCOMO, and NTT DATA)

Social Data

Numbers of Consolidated Group Companies and Employees

Fiscal year ended March 31	2014	2015	2016	2017	2018
Number of Group companies (Companies)	946	917	907	944	922
Number of employees (Employees)	239,750	241,600	241,450	274,850	282,550



*1 As of March 31, 2018, estimated number of employees for 922 consolidated companies in NTT Group

*2 As of March 31, 2018, total number of employees of NTT, directly affiliated companies in Japan, and their affiliated companies in Japan (total of 38 companies) *3 Section manager level or higher

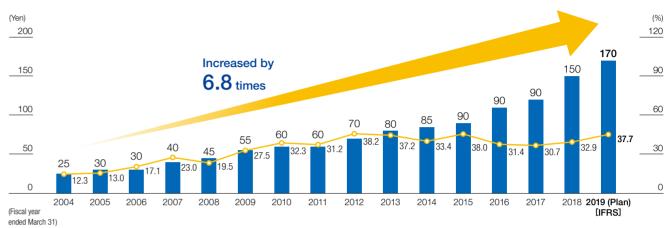
External Evaluations

	2014	2015	2016	2017	2018
SRI Indexes and Other External Evaluations (ORepresents Inclusion)					
Dow Jones Sustainability Index	O Asia Pacific	O Asia Pacific	O Asia Pacific	O Asia Pacific	World As of September
FTSE4 Good Index	_	_	0	0	O As of August
FTSE Blossom Japan Index	_	_	-	0	O As of June
Morningstar Socially Responsible Investment Index	0	0	0	0	O As of May
MSCI Japan ESG Select Leaders	_	_	_	O As of December	O As of June
S&P/JPX Carbon Efficient Index	_	_	_	_	O As of September
Intellectual Property Related					
Clarivate Analytics' Top 100 Global Innovators	0	0	0	0	As of January
Brand Related					
Brand Finance Global 500	67	70	23	15	20 2nd among Japanese companies
BrandZ Top 100 Most Valuable Global Brands 2018	_	_	47	50	55 2nd among Japanese companies

Shareholder Returns

Annual Dividends

For the fiscal year ending March 31, 2019, NTT plans to issue annual dividends of ¥170 per share, making for the eighth consecutive year of higher dividends. Looking ahead, we will continue to increase dividend payments while giving consideration to stability and sustainability.



Dividends per share (left scale) --- Dividend payout ratio (right scale)

Note: Dividend amounts have been adjusted to reflect the 2-for-1 stock split of common stock conducted with an effective date of July 1, 2015.

Share Buybacks

NTT has continued to conduct share buybacks over the years, acquiring treasury stock worth more than ¥3 trillion since 1999. We will maintain a flexible stance toward conducting share buybacks based on consideration of factors including performance and market trends as well as the need to improve capital efficiency.



ended March 31)

*1 ¥48.0 billion acquired from market, ¥72.0 billion acquired from government *2 ¥46.6 billion acquired from market, ¥39.6 billion acquired from government *3 ¥61.0 billion acquired from market, ¥39.0 billion acquired from government *4 ¥253.2 billion acquired from market, ¥153.3 billion acquired from government *5 ¥101.2 billion acquired from market, ¥267.2 billion acquired from government *6 ¥106.9 billion acquired from market, ¥267.2 billion acquired from government

Value Creation Process

NTT Group is working together with its partners to pursue ongoing improvements in its distinctive corporate value through digital transformations. In these transformations, we will leverage the strengths we have cultivated over the years, namely, our robust domestic and overseas customer base,*1 global brand image,*2 human resources,*3 and world-leading R&D capabilities.*4

*1 No.1 shares for fiber-optic access services (approx. 68%) and mobile access services (approx. 45%) in Japan; 88% of the top 100 Fortune Global 500 companies are NTT customers

*2 Rated 20th in the world in Brand Finance Global 500

- *3 116,000 employees (approximately 40% of all employees) work overseas *4 Included among Clarivate Analytics' Top 100 Global Innovators

Ongoing Improvements of Corporate Value

 Social Issue Resolution ✓ Lifestyle Change

Management Fundamentals





Outline of New Medium-Term Management Strategies

Prior to the announcement of the new medium-term management strategies scheduled for November 2018, NTT announced an outline of the strategies and some of its measures.

Outline of New Medium-Term Management Strategies

Support our customers' Digital Transformations	 Promote B2B2X model for new value creation Roll out 5th-Generation Wireless System Provide personal services to support individuals' lifestyle changes
Accelerate our own Digital Transformation	Enhance competitiveness in global business Drive digital self-transformation in domestic business
Leverage talent, technologies, and assets	 Reinforce and globalize R&D Create new lines of business (Real estate, Electric power)
Promote ESG management and e	nhance returns to shareholders to improve corporate value

ESG Management

Contribute to SDGs with low environmental load

Energy Efficiency

Goals for 2025

Plan to participate in EP100*

- ✓ Double the energy efficiency of telecom business
- ✓ Reduce 10% of power consumption of telecom business
- Convert power facilities into Direct-current Saving energy in telecom facilities

Transition to EV

Goals in 2025***

- ✓ Convert 50% of general domestic corporate vehicles to EV
- ✓ 15% cost reduction of vehicles

Plan to participate in EV100**

*,** EP100 and EV100 are international initiatives sponsored by The Climate Group. EP100 encourages companies to double the energy efficiency of their businesses. EV100, meanwhile promotes the introduction of electric vehicles and related infrastructure.

*** Target in 2030: 100% Electric Vehicle Integration, -30% reduction of cost related company owned fleet.

Enhance Competitiveness in Global Business

With the goals of enhancing our competitiveness and improving profitability in the global market, we will establish a global holding company under NTT by the third quarter of the fiscal year ending March 31, 2019, and transfer control of NTT Communications, Dimension Data, NTT DATA, NTT Security, and NTT Innovation Institute to this company. In addition, a global innovation fund will be established under the jurisdiction of the global holding company along with a dedicated global procurement company.

Furthermore, NTT is considering integrating the four companies of NTT Communications, Dimension Data, NTT Security and NTTi3 (excluding the NTT DATA group) into two new businesses by the second quarter of the fiscal year ending March 31, 2020: one business will look after NTT's global business, and the other will cater to NTT's domestic business in Japan.

Status from Fall 2018

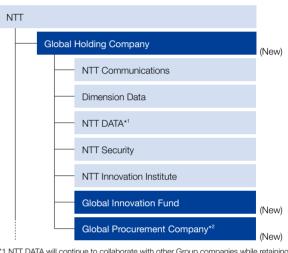
Current Status

NT	Т	
		NTT Communications
		Dimension Data
		NTT DATA
		NTT Security
		NTT Innovation Institute

Drive Digital Self-Transformation in Domestic Business Chief digital officers (CDOs) were appointed at Group companies and the IT Strategy Office was established at the NTT transformations of operating companies.

Appointed Chief Digital Officers within NTT Group (August 1, 2018)

Established IT Strategy Office at the NTT Head Office (September 1, 2018) • Will further enhance IT strategy and IT governance of NTT Group, boosting Digital Transformation within NTT Group



*1 NTT DATA will continue to collaborate with other Group companies while retaining its present management structure and status as a listed company.

*2 The dedicated global procurement company will procure the materials and services that are commonly used by domestic and overseas operating companies (excluding NTT, NTT East, and NTT West).

head office to accelerate overall efforts to drive the Group's digital transformation and to facilitate the self-driven digital

• Will work to further enhance the efficiency of business processes and to provide new value-added services

Next-Generation Smart City Initiatives



Aims of B2B2X Businesses

The digitization of information will allow for a variety of data to be collected, processed, and distributed via networks, making it possible for previously under-utilized information assets and expertise to be used more effectively.

The advancement of the Internet of Things (IoT), meanwhile, will enable for the conditions of various articles to be monitored in a timely fashion through smartphones and other mobile terminals as well as through network-connected sensors and monitors attached to machinery, buildings, and infrastructure.

In addition, artificial intelligence (Al) will greatly increase the ability of service providers (the center B) to create new value by instantaneously processing and analyzing massive amounts of

collected data.

NTT Group looks to accelerate the development of B2B2X businesses in order to deliver value to end users. NTT Group will achieve this acceleration by providing backstage support to service providers in various fields as a catalyst while at the same time taking advantage of information digitization, the IoT, AI, and other social and technological developments.

More information on NTT Group's B2B2X initiatives can be found on NTT's corporate website. http://www.ntt.co.jp/activity/en/b2b2x/

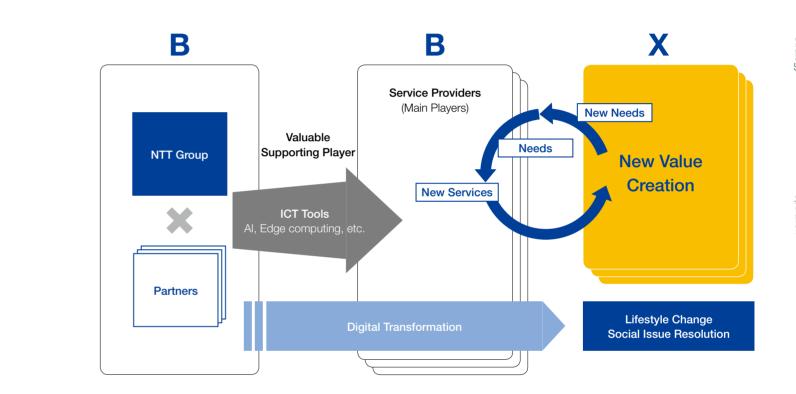


Smart Initiatives

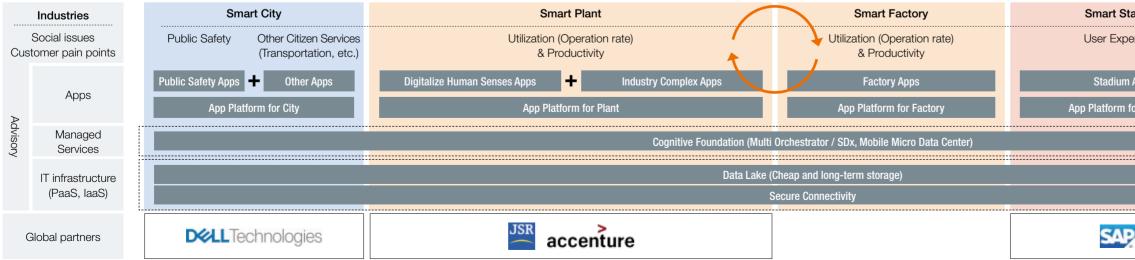
Grounded on its B2B2X model, NTT Group will collaborate with other left B global IT partners to provide comprehensive support for smart initiatives in various industries through a Groupwide effort. In this effort, we will seek to fully draw out the latent potential of ICT to create new value for end users.

NTT Group will not limit its efforts to utilizing the insight and platforms developed in specific sectors of a given industry to effectively deploy smart initiatives to other sectors within said industry. Rather, we will form solutions by accumulating differentiated and reproducible technologies and intellectual properties from various industries that can be applied to others. Specific areas of focus will include managed and infrastructure sectors such as PaaS and IaaS services. Armed with such solutions, NTT Group will increase the overall competitiveness of its solutions and its profit margins.

In this manner, NTT Group aspires to promote smart initiatives in all industries by fostering problem-solving capabilities and technologies that boast cross-industry applicability through actual cases of service provision. Moreover, NTT Group aims to deploy such smart initiatives inside Japan and throughout the global market in order to create a B2B2X model that extends beyond the boundaries of both companies and industries.



supporting player



Overview

For the acceleration of new value creation, NTT Group drives collaboration with various service providers
Contribute to service providers' digital transformations for lifestyle change and social issue resolution as a valuable

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Digital Transformation of Regional Economic Spheres-Initiatives in Sapporo and Yokohama

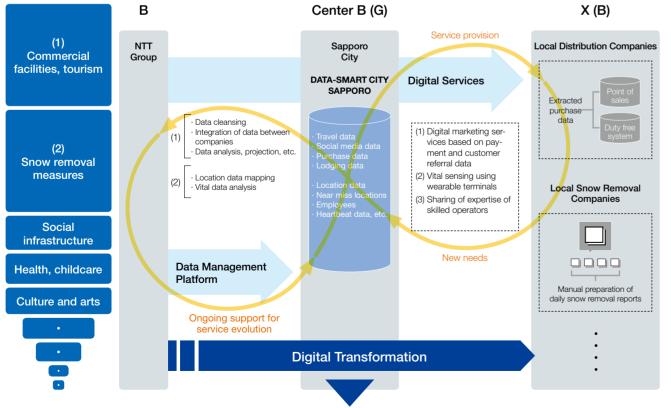
Sapporo Smart City Initiatives (Population of Sapporo City: 2.0 Million; Project Budget: ¥1.6 Trillion)

In July 2016, NTT Group joined the Sapporo City ICT Utilization Platform Study Panel, and the Group has since proceeded to advance smart city initiatives in Sapporo City. Targeting a wide range of fields, including tourism, transportation, and snowfall countermeasures, these initiatives have been aimed at invigorating and resolving the issues faced in the region. As one facet of these initiatives, the DATA-SMART CITY SAPPORO ICT platform open data website was established in January 2018 through a public-private partnership. Regional economic stimulus measures are being advanced through cooperation between Sapporo City and local companies, with examples of such cooperation including the sharing and analysis of data that is beneficial to business growth. Today, the number of companies participating in these initiatives is gradually expanding, and we are seeing participation from various industries, including the commercial facility, lodging, and tourism industries. With the aim of accelerating these initiatives, NTT Group is coordinating with the Ministry of Economy, Trade and Industry's project for promoting sharing of industry data* to facilitate more sophisticated data analyses and thereby make further contributions to

regional economic development.

Sapporo City is known globally for its heavy snowfall, and, being a massive city with a population of 2.0 million, this metropolis is forced to spend exorbitant amounts on snow removal each year. Moreover, snow impedes people's everyday lives as well as distribution in the city for roughly half of each year. NTT Group sought to address this situation by using ICT to share the expertise of snow removal skilled operators and to compile daily snow removal measure reports (Figure 1). These measures targeted massive improvements in snow removal efficiency. In addition, we have conducted the first automated driving trial on public roads (Figure 2). Taking place in the heart of Sapporo City, this trial was geared toward alleviating traffic congestion in the city. As seen in these initiatives, NTT Group is working to resolve various social issues in Sapporo.

* This Ministry of Economy, Trade and Industry fiscal 2017 adjusted budget project is designed to promote data collection and utilization between several companies in the five priority fields for connected industries (1, Automated driving and mobility services, 2 Biotechnologies and materials, 3. Smart life, 4. Plant / infrastructure safety management, and 5. Manufacturing and robotics)



Expansion of initiatives to ordinance-designated cities and regional economic spheres across Japan in conjunction with government policy

Figure 1: Snow Removal Measures

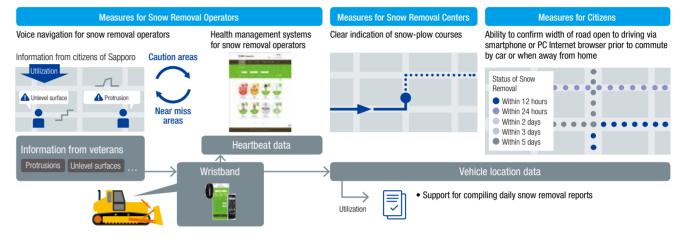
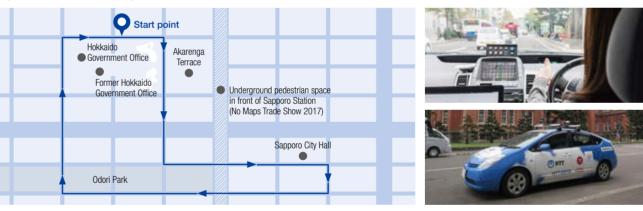


Figure 2: Automated Driving



Yokohama Smart City Initiatives (Population of Yokohama City: 3.7 Million; Project Budget: ¥3.6 Trillion)

Yokohama City is promoting open innovation for utilizing data and creating new value through coordination with private-sector companies via means such as the use of data to accurately track conditions and identify issues when formulating municipal government policy. Following the formulation of Yokohama City's plan for the utilization of public and private data as well as the establishment of the School of Data Science at Yokohama City University, NTT signed the Agreement for Comprehensive Collaboration for Realizing a Super-Smart Society by Utilizing Public and Private Data. This agreement is part of Yokohama City's efforts to step up public-private-academia collaboration regarding the utilization of public and private data to realize a super-smart society.*

Based on this agreement, we will expand the scope of our initiatives for utilizing data in various fields, including healthcare,



welfare, child-rearing, and education, to improve the convenience of people's lives and for realizing more efficient and effective governance through data-based policy making. Yokohama City and NTT Group will seek to address the increasingly complicated and diverse needs of citizens.

In conjunction with government policy, NTT Group will expand the initiatives it is conducting in Sapporo City, Fukuoka City, and Yokohama City to ordinance-designated cities, communities, and regional economic spheres across Japan. These efforts will function as a platform for working together with communities to resolve the issues they face and to invigorate these communities.

* As defined by the 5th Science and Technology Basic Plan approved by the Cabinet Office in January 2016, a super-smart society is one in which people can receive the items and services they need when and in the amount required. This society should be capable of providing fine-tuned responses to various social needs and making high-quality services available to all. In this manner, an ultra-smart society will enable people to overcome differences of age, gender, region, and language to live empowered and comfortable lives.

Digital Transformation Aimed at Public Safety-Initiatives in Las Vegas Spreading to the World



Las Vegas Smart City Initiative

The recent rise in crime and disasters in urban areas is placing even more importance on the duty of local governments, police and fire departments, and other authorities to protect the safety of citizens at city and event sites where large numbers of people gather. Fulfilling this duty requires that these authorities be able to track the movement of crowds and traffic conditions and detect emergency situations. Facilitating swift initial responses is of particular importance. Accordingly, there is a need for public safety solutions that install various sensors to allow relevant organizations to maintain an up-to-the-moment understanding of situations and that predict and analyze incidents that are highly likely to be of a criminal nature.

To respond to this need in Las Vegas, NTT, NTT DATA, NTT Communications, and Dimension Data have partnered with Dell Technologies Inc. Working together with the city, these companies will pool their expertise to realize a public safety solution that accommodates the needs of both relevant authorities and citizens.

The public safety solution we are verifying in Las Vegas has three notable characteristics.

The first characteristic is its reactive nature, which facilitates swift responses to accidents and incidents. Information from surveillance cameras and sensors is analyzed by micro data centers (edge systems) neighboring the monitored area to quickly detect accidents or incidents and dispatch police or fire fighters or make prompt announcements as necessitated by the situation.

The second characteristic of this solution is its proactive, predictive response capabilities. By utilizing multisource information to

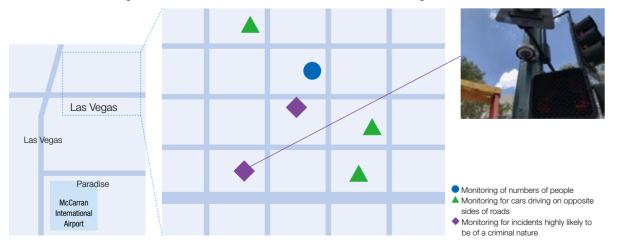
analyze trends based on information from various sources, this solution employs AI technologies to predict crowding, cars driving on opposite sides of roads, and incidents that are highly likely to be of a criminal nature in order to furnish preemptive responses.

The third characteristic is its swift and efficient deployment of ICT resources. By combining NTT's orchestration technologies and Dell Technologies' virtualization technologies, we have created the innovative Cognitive Foundation architecture, which allows for integrated construction, configuration, management, and operation of the user's existing ICT resources.

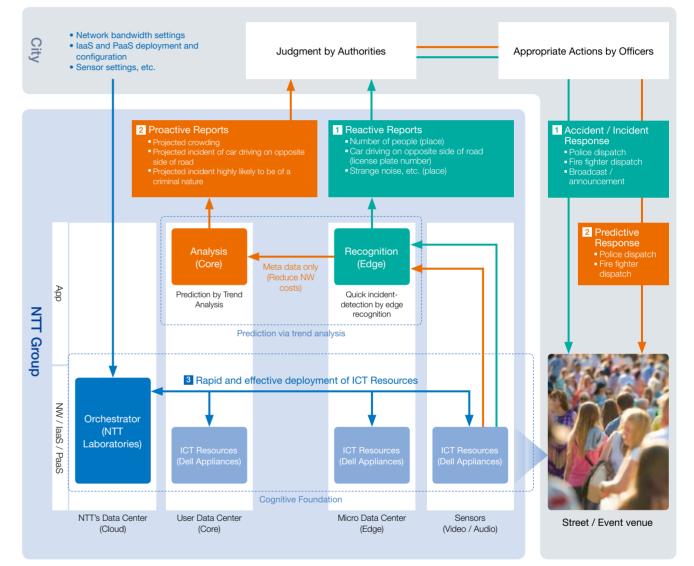
We are able to provide fully integrated services to customers by taking advantage of the robust product lineup of Dell Technologies, the AI and orchestration technologies of NTT Laboratories, the integration capabilities of NTT DATA and Dimension Data, and the data centers of NTT Communications. By supplying public safety solutions that make use of technologies for comprehensive management of cutting-edge AI, IoT, and ICT resources, we will contribute to the creation of digital societies.

Together with Dell Technologies, NTT Group plans to launch a commercial version of this solution for cities in the United States and around the world. This launch is scheduled for winter 2018, after the completion of the joint verification test. Furthermore, we anticipate that the Cognitive Foundation architecture will be a powerful asset going forward, and we intend to leverage this asset to expand B2B2X businesses in various ICT fields, including agriculture, factories, and connected cars.

Joint Verification Test Involving the Installation of Numerous Sensors in Downtown Las Vegas









NTT Group contributes to the creation of a safer, more secure, and more innovative future with its world-leading technologies.

Role of NTT Group's Research and Development

As a world-leading ICT conglomerate, NTT Group views research and development as a wellspring of new value to be created in diverse fields through the realization of new technologies. We also recognize that research and development is crucial to our efforts to support customers' digital transformations as well as to transform individual lifestyles together with NTT Group operating companies. Furthermore, research and development helps

us improve productivity; address safety, disaster preparedness, and other issues; and thereby strengthens the competitiveness of industries and resolves social issues. ICT is used in countless fields. We therefore look to overcome challenges through research and development that extends beyond NTT Group to include partnerships with entities from various other industries.

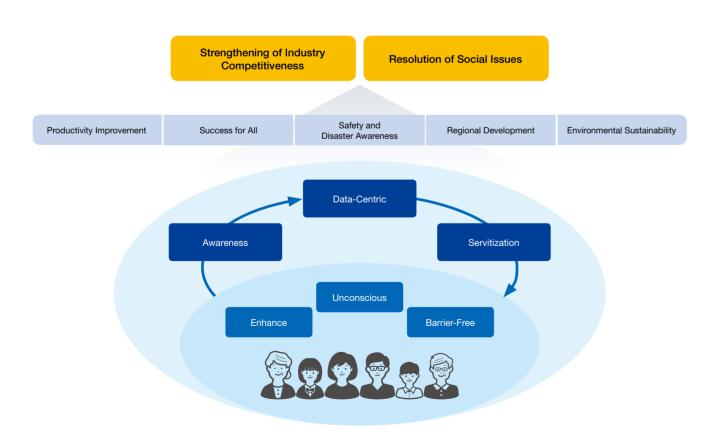
Goals of NTT Group's Research and Development and Five Key Technologies

The technologies of the future will have to be made to feel more natural to people. There are three perspectives that will need to be adopted to accomplish this objective: "enhance," the perspective of ensuring that our intent is correctly understood and communicated; "unconscious," the perspective of allowing people to benefit from sophisticated technologies even if they are not consciously aware of them; and "barrier-free," the perspective of personalizing technologies to accommodate the differences between individuals.

From the standpoint of companies, there are even more perspectives we must account for in future technologies. The perspective of "awareness" looks to maintain up-to-the-moment

understanding of changes in customer behavior or operating environment conditions. The perspective of "data-centric" entails making decisions for reforming corporate work processes and creating new value through data processing techniques. The perspective of "servitization" is focused on providing experiences as opposed to goods. Based on all of these perspectives, NTT Group is tasked with creating technologies that help forge stronger bonds between companies and their customers.

With this vision in mind, NTT Group has identified five key technologies that will be crucial for the future: artificial intelligence (AI), media, Internet of Things (IoT), security, and network technologies.



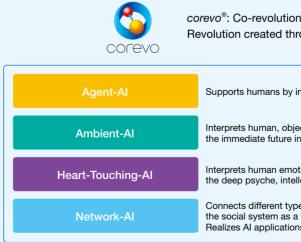
Five Key Technologies 1 corevo® Al Technologies

Under the NTT Group's corevo® AI technology brand, we are advancing research and development on four types of AI technology with the goal of enriching people's lives by complementing and drawing out their capabilities.

The first is Agent-Al, which supports people's everyday lives by developing an understanding of people's intents and emotions based on voice, language, and images to engage in high-level communication with people.

In this area, our listening technologies can currently pick up a person's voice even with more than 100 dB worth of background noise and can also distinguish between the voices of up to six people using the same microphone. In addition, these technologies are able to determine a speaker's language with around 90% accuracy after one second of speaking and with approximately 99% accuracy after five seconds. Our listening technologies can also identify emotions, such as satisfaction, joy, and sadness as well as hot anger, which entails a roughened voice, and cold anger, which is expressed in a composed and sarcastic manner. Furthermore, NTT Group is developing technologies for understanding intent that will make it possible to judge the similarity of statements with the same sense but different character strings (e.g., "My golf balls don't travel." and "How can I increase shot distance with a driver?").

NTT Group is also developing other technologies that make conversations with Als feel more natural. One example is a technology that enables AI to respond at appropriate timings by identifying breaks in conversations or the conclusions of statements and to respond to new entries into conversations. Another example is a technology that can synthesize voice samples in Japanese or other languages in a voice similar to that of a given individual by only using 30 minutes of voice data from the individual. In addition, NTT Group is working on a technology that allows for Als to engage in prolonged small talk, which accounts for 60% of normal conversations.



More information on NTT Group's corevo® AI technologies can be found on NTT's corporate website. http://www.ntt.co.ip/corevo/e/index.html

The second type of AI technology included in the corevo® brand is Heart-Touching-AI. This type of AI understands, caters to, and builds upon essential, primordial, and unconscious elements of people, such as their intellect, instinct, and body. In this area, we took part in the Sports Brain Science Project. Researching the differences in brain functioning between leading athletes and amateurs during exercise, this project has been developing an understanding of not only conscious differences but also unconscious and subconscious differences.

The third type is Ambient-Al, which refers to Als that function as a brain of IoT equipment. These Als interpret data from sensors in real-time to perform spatiotemporal analysis and deduce cause-and-effect relationships. This makes it possible to detect predictive signs of incidents well in advance, to explore optimal scenarios, and to design and perform smart guidance and control. Using such Als, NTT DOCOMO launched Al Taxi® on February 15, 2018. This service utilizes technologies for predicting population distributions based on population data extrapolated from smartphone and mobile phone signals, weather forecasts, and event information. A past verification test has indicated that this service can contribute to higher revenues for taxi drivers and shorter waiting times for customers.

The fourth corevo[®]-brand AI technology is Network-AI. In this category, we develop systems in which various Als connected through a network freely coordinate their various responses to make the network itself function as a single AI, performing both globally optimized control and area-dependent control. Network-AI provides value to customers irrespective of the protocol and the network operator used.

Revolution created through cooperation with various players

Supports humans by interpreting the information they generate

Interprets human, objects, and the environment, and forecasts and controls the immediate future instantly

Interprets human emotions and physical conditions, and understands the deep psyche, intellect, and instinct

Connects different types of AI into collective intelligence and optimizes the social system as a whole Realizes Al applications for networks



Five Key Technologies 2 Immersive Telepresence Technology

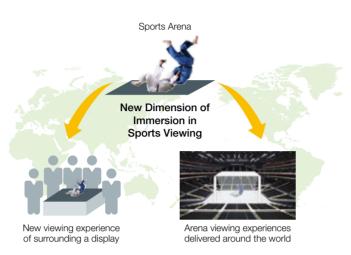
NTT Group's ultrahigh-immersion media technologies are largely based on three approaches: technologies for creating and transmitting spaces, which are exemplified by our Kirari® immersive telepresence technology; technologies that allow viewers to place themselves in a space, such as by watching a professional baseball player pitch from the viewpoint of the batter; and space direction technologies that take advantage of optical illusions to realize the simultaneous viewing of 2D and 3D images.

Looking specifically at one of these technologies, the concept for our *Kirari*[®] immersive telepresence technology was announced in February 2015, and research and development for this technology has since advanced through verification tests in the sports and entertainment fields. In addition to previous immersion experiences, which were based on 2D movement, this technology is now able to incorporate depth to portray more natural movement and add a new dimension of immersion. *Kirari*[®] can therefore create new viewing experiences, such as displays in which numerous people view sporting events from multiple angles. Going forward, NTT Group will continue to evolve and improve the economic viability of element technologies to

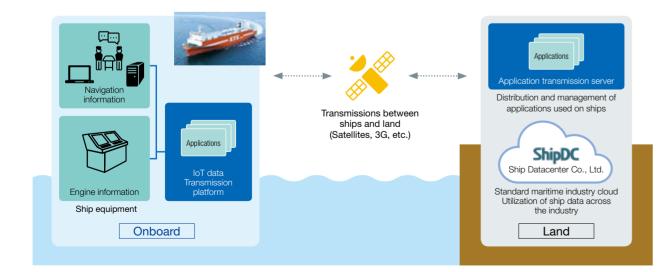
Five Key Technologies 3

The core requirements of IoT technologies can vary based on the field in which they are to be used, making it impossible to respond to the broad spectrum of IoT needs with a single platform. Conversely, the development of multiple IoT systems makes it difficult to apply technologies to future systems. For these reasons, the standardization of IoT architecture is of the utmost importance. NTT Group has defined basic IoT architecture and is using this architecture as a foundation for the development of IoT systems for various industrial fields.

For example, NTT Group carried out a successful verification test for a next-generation shipping IoT platform for improving shipping safety and efficiency together with Nippon Yusen Kabushiki Kaisha and MTI Co., Ltd. The requirements for this platform differed from standard IoT platforms in that the distance accelerate the development of services that revolutionize live viewing of sports and entertainment and corporate broadcasts.



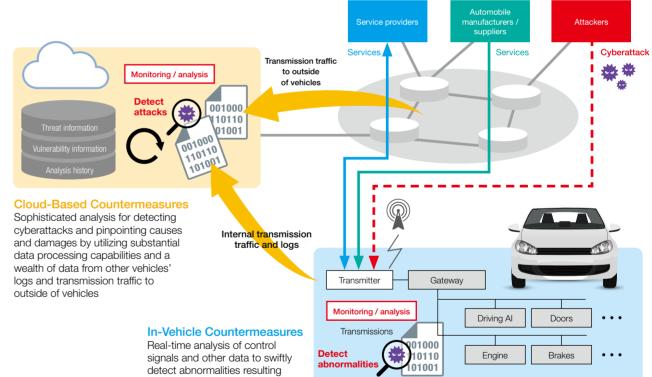
between ships at sea and on-land operation centers forced us to rely on satellite transmissions, which suffer from incredibly low bit rates. The platform verified in this test used a framework in which data from the various sensors in a ship's engine and navigation systems first underwent preliminary processing onboard the vessel. The processed data was then sent to operation centers, which used this data to oversee ship operations and transmit software updates. NTT Group plans to continue taking part in such verification tests going forward as it creates innovations with its partners in a bid to improve the safety and economic viability of shipping, address environmental issues, and boost the competitiveness of Japan's maritime industry on the global stage.





Ensuring safety and security in society and industry requires that we take steps to protect against cyberattacks. This protection cannot be limited to transmission networks: it must extend to IT systems comprising services and computers as well as the IoT systems of factories, buildings, and automobiles, which have been increasingly being connected to networks in recent years. NTT Group aids in this protection through research and development on encryption technologies that ensure data confidentiality and privacy and cybersecurity technologies that safeguard IT systems and IoT against cyberattacks.

In the IT security field, NTT Group has discovered a new privacy threat-Silhouette-in social web services (SWSs). We have since developed risk assessment methodologies and identified several SWSs at risk of being impacted by Silhouette. A new threat to privacy, Silhouette has the potential of identifying the name of a user's SWS account from malicious third-party websites if a user of a SWS happens to visit such a site. This information can be used to target said user with various cyberattacks, including misuse of their personal information and victimization through online scams. We have already found



from cyberattacks

cases in which the account names of users of Twitter and other globally recognized SWSs have been identified. NTT Group has thus been supplying SWS platform operators with information on this threat and possible countermeasures and working together with them to verify the effectiveness of these measures. Our research in this area has helped realize a safer Internet for users around the world.

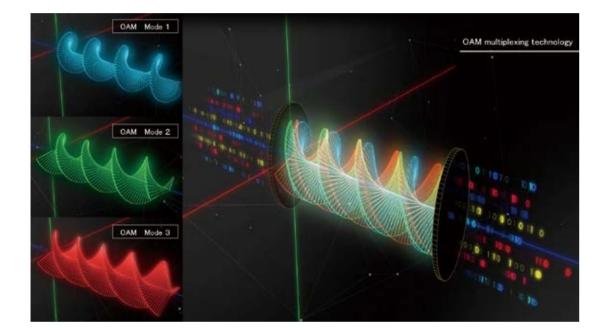
One of NTT Group's security initiatives in the IoT field is the research and development on technologies for detecting and addressing cyberattacks targeting connected cars. An attack against a connected car is a potential threat to human lives. It is therefore crucial to swiftly detect such attacks, accurately pinpoint their causes and damages, and implement appropriate response measures. As its first step toward realizing these capabilities, NTT has developed a technology that analyzes transmissions within connected cars to immediately detect any abnormality. The next step will be to coordinate this technology with cloud servers to realize precise detection and accurate responses and thereby contribute to safety and security in the automobile society of the future.

Five Key Technologies 5 Network Technologies

In a world first, NTT Group has realized 100 Gbps wireless transmission using a new principle-orbital angular momentum (OAM) multiplexing—with the aim of achieving terabit-class wireless transmission to support demand for wireless communications in the 2030s.

In a laboratory environment, NTT Group made remarkable progress in transmission capacity thanks to its system that mounts data signals on the electromagnetic waves generated by this new principle in combination with widely used multipleinput and multiple-output (MIMO) technology.

The results of this experiment revealed the possibility of applying this principle to large-capacity wireless transmissions at a level about 100 times that of LTE and Wi-Fi and about five times that of fifth-generation (5G), which is scheduled for launch. This transmission technology is expected to contribute to the development of innovative wireless communications technologies for such next-generation 5G systems as connected cars, virtual reality and augmented reality, high-definition video transmission, and remote medicine.



Basic Research Initiatives

With an eye to more than a decade down the line, NTT Group is capacity, size, energy, and other aspects. We are committed to advancing cutting-edge R&D projects to create new principles making strides in basic research to drive the ongoing growth of and concepts that eclipse current technologies in terms of speed, NTT Group and the evolution of its R&D activities.

Basic Research Initiative 1 Completely New Type of Computer

There are combinatorial optimization problems that are difficult to solve with conventional computers. Recognizing this issue, NTT Group is advancing research and development on a completely new type of computer-LASOLV, a portmanteau of the words "laser" and "solve." This computer takes advantage of physical phenomena by using optical parametric oscillators to swiftly solve such problems.

Ising-model computers, which use superconductive elements and are also capable of solving such problems, require cooling systems as they can only be operated at temperatures of around -270°C. LASOLV, however, can function at room temperature. It also boasts world-leading capacity, currently capable of solving 2,000-node / 4 million-node combinatorial optimization

Basic Research Initiative 2 Never-Before-Seen Battery

It can be expected that the evolution of IoT technologies will lead to various sensors being installed throughout society. These sensors will require batteries. It will be impossible to recover batteries under certain circumstances, and it will therefore be important to ensure that these batteries do not adversely impact the environment. NTT's solution to this predicament is its Tsuchinikaeru Battery[®], a never-before-seen, eco-friendly battery that is non-toxic, does not use rare metals, and employs fertilizer material in its battery cells to prevent damage to soil and living organisms.

Currently, this battery is able to power lights or buzzers, but its capacity is only a tenth that of batteries currently on the market, meaning that additional research and development is needed to extend this short life span. We see potential for this battery to create new businesses where harmony with nature is required, such as soil moisture sensors; ecosystem, soil, and other environmental monitoring; and detection of indicators related to floods, pollution, and climate events.

problems, and we aim to realize computational power that can solve 100,000-node / 10 billion-node combinatorial optimization problems in the future.





ESG Management for Corporate Value Improvements

NTT Group practices environmental, social, and governance (ESG) management to address environmental and social issues. We have defined the reduction of our environmental impact, security, and the encouragement of participation by diverse human resources as material issues for NTT Group. Based on these issues, we are working to minimize business risks while capturing business opportunities to drive ongoing improvements in corporate value.



*1 The SASB Sustainability Accounting Standards are metrics for quantitative representation of non-financial information put forth by the Sustainability Accounting Standards Board of the United States.

- *2 vs. fiscal year ended March 31, 2018
- *3 Performance in the fiscal year ended March 31, 2018: 0.1%
- *4 Performance in the fiscal year ended March 31, 2018: 1.18%
- *5 Performance in the fiscal year ended March 31, 2018: 5.1%

Expansion of economic value

Expansion of upside potential

Reduction of downside risks

- Reduction of energy-related costs
- Improvement of earnings capacity through provision of value-added services
- Enhancement of reputation through provision of reliable services
- Expansion of business and improvement of work processes through diverse ideas
- Recruitment of talented human resources and reduction of employee turnover risks

etc.

Ongoing Improvements of Corporate Value

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ESO

Value Creation through **Environmental and Social** Contributions

NTT Group is committed to mitigating environmental and social risks and contributing to the resolution of issues across society.



Initiatives for Addressing Material Issues 1 Reduction of Environmental Impact

Reducing CO₂ emissions and otherwise lowering environmental impacts is recognized as an important issue needing to be addressed internationally in order to create a sustainable society. NTT Group is pursuing sustainable business development over the medium to long term. For this reason, NTT Group considers it absolutely essential to reduce its environmental impact in order to grow further.

NTT Group is therefore committed to reducing the environmental impact of its business activities while working together with stakeholders to create a future in which people and the planet are in harmony through the development and proliferation of ICT services and cutting-edge technologies.



NTT Group Environmental Statement and 2030 Environmental Targets

The NTT Group Environmental Statement compiles our vision for the future of the global environment we aim to build with our stakeholders, our environmental initiatives for building that future, and the company we aim to become through these efforts. The declaration begins with the words "People & Planet in Harmony." These words symbolize our goal of creating a future housing a sustainable society in which everyone and everything around the world is interconnected. To help realize such a future, we at NTT Group will push forward with our daily environmental

activities to fully exercise our capabilities as forerunners in environmental contribution.

We have defined three characteristics of the vision for the future encapsulated in the words "People & Planet in Harmony." NTT Group will contribute to endowing the future with these characteristics through the provision of ICT services and cuttingedge technologies.

Through our environmental issue materiality analyses, we have identified NTT Group's key environmental issues to be



* Zero emissions: NTT Group considers a final disposal rate of 1% or less to satisfy zero emissions conditions

More information on the NTT Group Environmental Statement and 2030 Environmental Targets can be found on NTT Group Sustainability Report, "Protect the Global Environment" http://www.ntt.co.jp/csr e/index.html



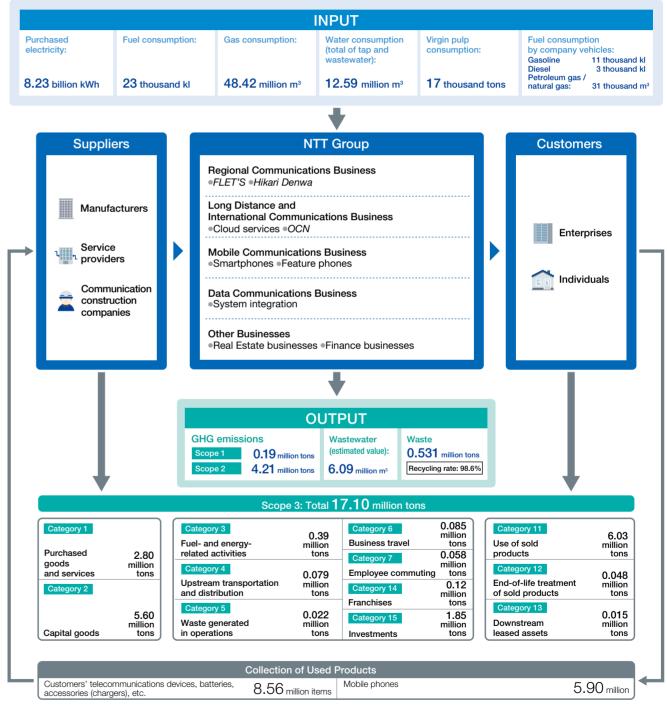
climate change, energy (electricity), resources, and ecosystems Based on these issues, the Group has established the 2030 Environmental Targets, a set of environmental targets pertaining

Overview of NTT Group's Environmental Impact

To reduce the environmental impact of its business activities the greatest extent possible, NTT Group is taking steps to tra and analyze what types of resources and energy it is using an what types of environmental impacts are occurring throughout

The NTT Group's Material Balance* (Fiscal Year Ended March 31, 2018)

Purchased electricity:	Fuel consumption:	Gas consumption:
8.23 billion kWh	23 thousand kl	48.42 million m ³



* Relationship between volume of resources and energy required for business activities and associated waste and emissions production

IS.	to these issues to be accomplished by the fiscal year ending
	March 31, 2031, that is meant to guide us in realizing the future
ng	described in the NTT Group Environmental Statement.

s by	its business activities.	
rack	In the fiscal year ended March 31, 2018, we achieved year-	
and	on-year reductions of 0.13 billion kWh in purchased electricity	
out	and 2,000 kl in gasoline consumption.	

ESC

Initiatives for Accomplishing the 2030 Environmental Targets 1: Contributions to Reducing Society's CO₂ Emissions

NTT Group's Contributions to Reducing Society's CO2 Emissions

Targets and Results

ICT contributes to the reduction of the environmental impacts of our lives and society in various ways, including making our lives and work more efficient and providing alternatives for moving goods and people. For example, the digital distribution of books, music, movies, and other content cuts back on the energy consumed in transporting the books. CDs. DVDs. and other physical media that are normally used to distribute such content. For the fiscal year ending March 31, 2031, NTT Group has established the target of contributing to a reduction in the CO2 emissions of society through the provision of its services and technologies that is at least 10 times greater than NTT Group's own emissions. In the fiscal year ended March 31, 2018, the reduction in CO2 emissions from society achieved in this manner was 10.1 times the amount of emissions of NTT Group. However, information transmission volumes are growing with each coming year in conjunction with the spread of smartphones and the development of high-speed, large-capacity networks through the Hikari Collaboration Model, and these transmissions require energy. NTT Group will therefore continue initiatives to achieve its targets going forward.

Reduction of NTT Group's CO₂ Emissions

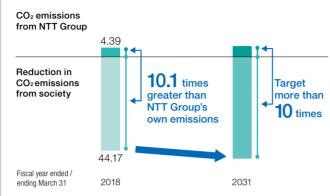
In the ICT field, a primary area of business for NTT Group, the advancement of technologies brings concerns for the rises in electricity consumption that accompany the need for processing larger volumes of data and cooling massive servers. For this reason, ICT companies are increasingly being expected to make their operations more energy efficient.

NTT Group provides data center services and various other ICT services, and the use of electricity purchased to supply such services accounts for over 95% of the Group's CO₂ emissions. We are therefore implementing energy-saving initiatives, realizing that these initiatives will also contribute to reductions in CO₂ emissions.

NTT Group uses large amounts of electricity, with purchased electricity amounting to more than 8.2 billion kWh a year. Due to the rise in the price of electricity as a result of the start of the feed-in tariff scheme for renewable energy, NTT Group faces a large risk that it will be affected financially if this trend continues. Accordingly, reductions in CO₂ emissions through the use of energy-saving equipment are also being pursued from a financial standpoint. Measures conducted in the fiscal year ended March 31, 2018, included consolidating telecommunications equipment. making equipment more energy efficient, and introducing such new technologies as optimal air-conditioning control systems and direct current (DC) power transmission systems. These measures for reducing CO₂ emissions from electricity consumption were conducted through an investment of approximately ¥6.8 billion.

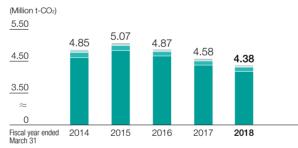
As a result of these measures, we were able to achieve a decrease of approximately 600.0 million kWh in electricity consumption. By advancing such efforts, we are contributing to the realization of a low-carbon society while simultaneously mitigating financial risks for the Group.

NTT Group's Contributions to Reducing Society's CO2 Emissions (Million t-CO₂)



1. The reduction in CO₂ emissions from society is calculated by converting the energy con servation benefits of supplied ICT services into CO₂. In converting energy conservation benefits into CO₂, the Company referenced the calculation methods included in the Telecommunication Technology Committee's Methodology for the Assessment of the Environmental Impact of Information and Communication Technology Goods, Networks and Services (JT-L1410) and Life Cycle Assessment Society of Japan's Guideline for Information and Communication Technology (ICT) Eco-Efficiency Evaluation. 2 Data collected from operations in Japan only

CO₂ Emissions from Business Activities



Use of electricity Use of gas and fuel Travel of company vehicles Use of heat

Breakdown of CO₂ Emissions from NTT Group

Fiscal year ended March 31	2016	2017	2018
Electricity use (Billions kWh)	8.74	8.36	8.23
Emission coefficient (kg/kWh)*	0.534	0.524	0.508
CO2 from electricity (Millions of t-CO2)	4.67	4.38	4.18
CO ₂ from gas and fuel consumption (Millions of t-CO ₂)	0.139	0.134	0.135
CO ₂ from company vehicles (Millions of t-CO ₂)	0.042	0.038	0.033
CO2 from heating (Millions of t-CO2)	0.027	0.029	0.027
Total CO ₂ emissions (Millions of t-CO ₂)	4.87	4.58	4.38

* Weighted average of emission coefficients announced annually by each power company weighted according to the amount of electricity from each company used by NTT Group Note: Data collected from operations in Japan only

* CO2 emissions from business operations exclude emissions of greenhouse gases other than CO₂



Initiatives for Accomplishing the 2030 Environmental Targets 2: Electricity Efficiency

Improvement of Electricity Efficiency Targets and Results

NTT Group has set the environmental target for the fiscal year ending March 31, 2031, of increasing electricity efficiency at data centers and other facilities in telecommunications operations* to at least 10 times higher than the levels seen in the fiscal year ended March 31, 2014. Realizing more efficient use of electricity in telecommunications operations is both a means of mitigating business continuity risks and of curbing climate change.

In the fiscal year ended March 31, 2018, electricity efficiency in telecommunications operations was 3.6 times higher than in the fiscal year ended March 31, 2014. This feat was accomplished by introducing energy-saving equipment in accordance with the NTT Group Energy Efficiency Guidelines and improving network structure efficiency.

* Telecommunications operations contained within the scope of calculation for energy efficiency include the domestic operations of NTT East, NTT West, NTT Communications, NTT DOCOMO and NTT DATA

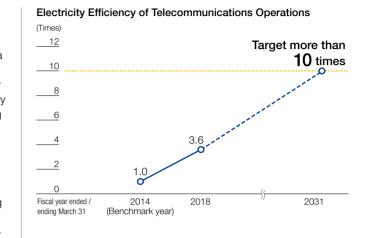
Energy Saving at Data Centers

NTT Group's data centers are among the world's largest, meaning that energy savings at data centers can greatly help improve enerav efficiency.

NTT Communications operates data centers with power usage effectiveness (PUE)* of less than 1.2, and NTT COMWARE CORPORATION operates data centers with PUE of less than 1.1, which are at the world's highest level for energy efficiency. We are striving to enhance PUE for our other data centers as well by introducing five-star equipment with the highest level of energy efficiency in accordance with the NTT Group Energy Efficiency Guidelines. In addition, NTT FACILITIES has engaged in R&D activities aimed at reducing the electricity consumption of data

Introduction of SmartDASH[®]

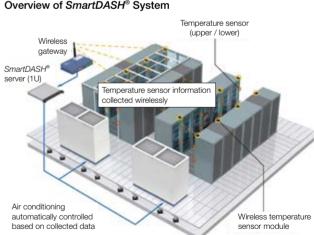
NTT Group is advancing the introduction of SmartDASH® at its communications buildings and data centers. This system is designed to realize optimal cooling of the ICT equipment used for providing services. By installing various sensors in server rooms, SmartDASH[®] tracks heat distribution throughout the room to achieve optimal control of air-conditioning systems based on the temperature fluctuations measured by these sensors. SmartDASH[®] is anticipated to contribute to reductions in energy consumption of up to 30%.



centers. For example, this company has been developing higher-efficiency technologies for electrical power units and airconditioning systems as well as central data center air-conditioning control systems for data centers. These innovations are contributing to energy savings at data centers.

We are also operating certain data centers using renewable energy. We have installed a 5 kW solar power generation system at NTT East's Komagome Data Center, and solar power systems have also been set up at seven other NTT Group data centers, contributing to reductions in CO₂ emissions.

* Power usage effectiveness: PUE is calculated by dividing the total electricity consumption of a data center by the electricity consumption of the servers and other IT equipment it houses. It is a figure larger than 1, with higher efficiencies represented by values approaching 1.



Overview of SmartDASH® System

Initiatives for Accomplishing the 2030 Environmental Targets 3: e-Mobility

Promotion of e-Mobility

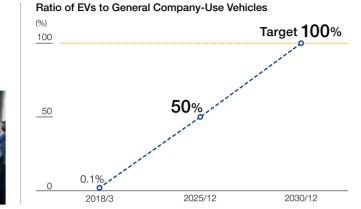
With regard to its fleet of company vehicles, NTT Group is promoting e-mobility while also downsizing its overall fleet. We have thus set the goal of converting 50% of general companyuse vehicles to electric vehicles (EVs) by 2025, with 100% conversion targeted by 2030. The installation of EV charging

stations at the premises of communications buildings and other Group facilities will be advanced alongside this conversion.

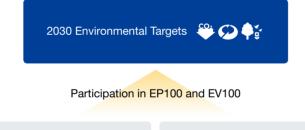


Participation in EP100 and EV100

NTT Group is preparing to announce specific targets for energy efficiency and e-mobility and to participate in the EP100^{*1} and EV100^{*2} international initiatives organized by the Climate Group to promote improvements in energy efficiency. Through participation in such international initiatives, NTT Group will declare its commitment to the environment and its stance toward addressing international environmental issues to external stakeholders.



- *1 EP100 is an international initiative that encourages companies to double the energy efficiency of their businesses. A condition for joining this initiative is to declare a target for doubling energy productivity with a set completion date.
- *2 EV100 is an international initiative that promotes the introduction of EVs. Companies seeking to participate in this initiative are required to make a public commitment to one or more of the following areas.
- 1. Integrating EVs into directly owned or leased corporate fleets
- 2. Placing requirements in service contracts (taxis, rental vehicles, etc.) for EV use
- 3. Supporting staff in using EVs by installing charging infrastructure at all premises
- Supporting EV uptake by customers by installing charging infrastructure at all premises Sources: EP100 website (https://www.theclimategroup.org/project/ep100)
 - EV100 website (https://www.theclimategroup.org/project/ev100) EV100 website (https://www.theclimategroup.org/project/ev100)



Improvement of electricity efficiency

Promotion of e-mobility

Tokyo 2020 Medal Project: Towards an Innovative Future for All

In April 2017, the Tokyo Organizing Committee of the Olympic and Paralympic Games launched the Tokyo 2020 Medal Project: Towards an Innovative Future for All. This project, which invites participation from people across Japan, involves collecting used mobile phones and other small appliances to recover bronze, silver, and gold to be utilized in creating the medals for the upcoming Olympic and Paralympic Games Tokyo 2020. NTT DOCOMO is participating in this project by collecting used mobile phones and employing recycling processes at docomo shops nationwide.



Mobile Phones Collected by NTT DOCOMO as of June 30, 2018: Approx. 4.1 Million

Unprecedented Project for the Olympic and Paralympic Games

In 2017, 94.8% of households in Japan possessed mobile communication terminals. Smartphones accounted for 75.1% of these terminals*, indicating that more homes owned smartphones than PCs. Furthermore, consumption trend surveys have shown that more than four years usually pass before people replace their mobile phones, which are now fulfilling an indispensable role in our daily lives as a gateway

Legacy for Creating an Ecologically Sound Society

Mobile phones contain various materials that are incredibly valuable to mineral-scarce Japan, including copper, silver, gold, and palladium. NTT DOCOMO is collecting used mobile phones at its roughly 2,400 docomo shops located nationwide. Moreover, we are extending the scope of these collection activities to various events pertaining to the Olympic and Paralympic Games Tokyo 2020 as well as to activities by other Tokyo 2020 Partner companies.

In addition, NTT DOCOMO has held classes on recycling mobile phones at certain elementary schools to help the children who will shape the future learn about the importance of recycling.

With eyes to 2020, we will work to contribute to the resolution of environmental issues in Japan and to develop a legacy for the creation of an ecologically sound society.

Website on NTT DOCOMO's participation in Tokyo 2020 Medal Project: Towards an Innovative Future for All (Japanese only) https://medal-project.idc.nttdocomo.co.jp/





Reference (Japanese only) https://medal-project.idc.nttdocomo.co.jp/

to information. This situation indicates that the Tokyo 2020 Medal Project, an unprecedented project for the Olympic and Paralympic Games in which medals are made entirely from materials recycled from used mobile phones and other small appliances, represents a framework that is effective for recycling our finite resources.

* Source: ICT Service Usage Trends, Information and Communications in Japan 2018, Ministry of Internal Affairs and Communications



Mobile collection station at event



Mobile phone recycling class

Overview

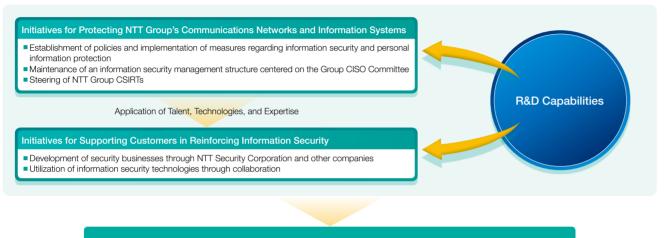
Initiatives for Addressing Material Issues 2 Reinforcement of Information Security and Personal Information Protection



The expectations of customers and society for information security are rising in light of occurrences of large-scale personal information leaks and changes to the regulatory environment, such as the introduction of personal information protection regulations by the European Union. Were a leak of personal information to occur, NTT Group's operations would suffer from a decrease in corporate value, the loss of customers, and other negative impacts. It is therefore crucial that we ensure stringent information management.

Information security is an important issue for the businesses of customers and for society as a whole. We are committed to utilizing the security measure implementation and R&D expertise we have cultivated through our information transmission operations to assist customers in reinforcing their security measures. We thereby aim to help resolve security issues across society in order to contribute to the healthy development and transformation of society.

Overview of NTT Group's Information Security and Personal Information Protection Initiatives



Contribution to the Healthy Development and Transformation of Society

Initiatives for Protecting NTT Group's Communications Networks and Information Systems

Establishment and Implementation of Policies Regarding Information Security and Personal Information Protection NTT Group has established policies and rules concerning customer, shareholder, employee, and other information in accordance with the NTT Group Information Security Policy.

Furthermore, each Group company has developed a personal information protection structure that matches its particular business characteristics and has formulated its own information protection policies. Group companies are also advancing various other initiatives, including establishing organizations for promoting

Information Security Management Structure

NTT Group maintains an information security management structure in which the chief information security officer serves as the highest-ranking authority. Rigorous information security management is practiced under this system. In addition, the

NTT-CERT

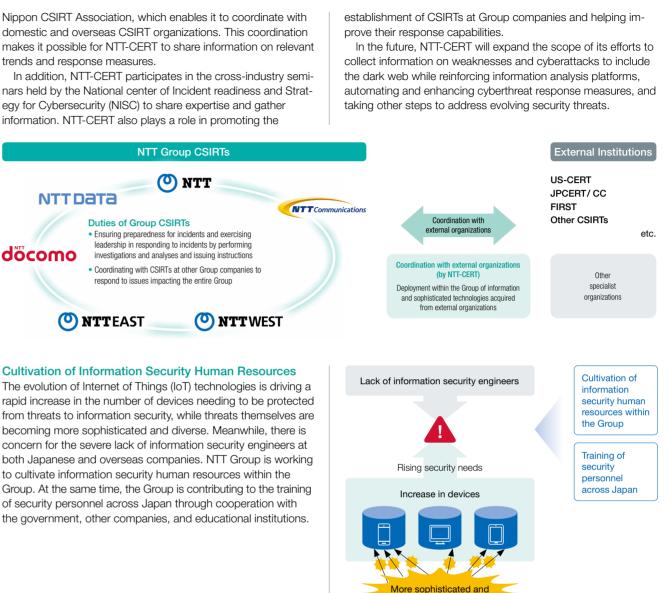
NTT Group established NTT-CERT in 2004 to function as a computer security incident response team (CSIRT). This team collects information regarding security incidents associated with the Group. It then offers support for addressing these incidents, formulates measures to prevent reoccurrence, develops training programs, and provides security-related information. As a central element of NTT Group's security initiatives, NTT-CERT provides a venue for consultations regarding information security. The team also collaborates with organizations and specialists inside

information security management and introducing security systems. Examples of such measures at Group companies are the introduction of security systems and the implementation of strict hardware and software security measures to prevent unauthorized access to and loss of information and infection of systems by computer viruses and to manage removal of information from Company premises. At the same time, we are conducting other ongoing information security measures, including thoroughly educating employees and appropriately supervising outsourcing contractors.

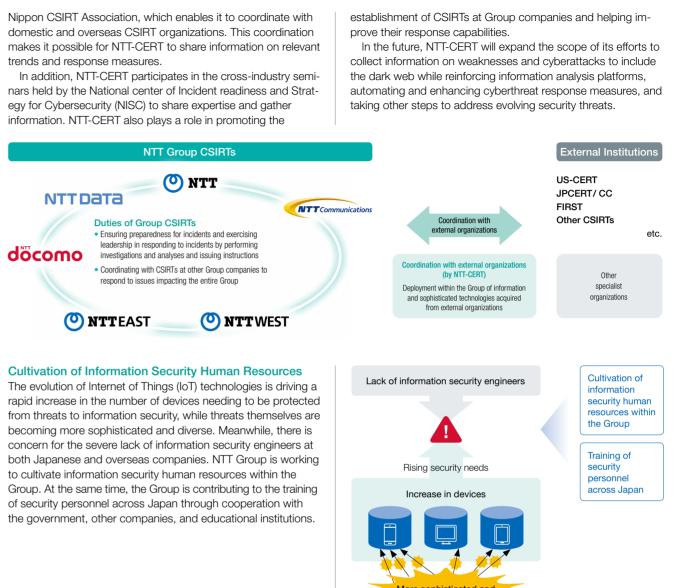
Group CISO Committee has been established to formulate Groupwide information security management strategies, plan and implement related measures, cultivate human resources, and otherwise address information security issues through coordination between Group companies.

and outside NTT Group to offer support for detecting and resolving security incidents, minimizing damages, and preventing occurrence. NTT-CERT is thereby contributing to better security for both NTT Group and societies that are permeated by information networks.

Moreover, NTT-CERT coordinates with the United States Computer Emergency Readiness Team (US-CERT) and the Japan Computer Emergency Response Team Coordination Center (JPCERT/CC) and is also a member of the Forum of Incident Response and Security Teams (FIRST) and the



eqy for Cybersecurity (NISC) to share expertise and gather information. NTT-CERT also plays a role in promoting the



Information Security Human Resource Development within NTT Group

NTT Group has set the goals for realizing increases in the number and proficiency of its staff of security experts in Japan to be accomplished by the fiscal year ending March 31, 2021. Based on this target, Group companies are implementing human resource development measures based on the types

Training of Security Personnel across Japan

NTT Group is engaged in initiatives for addressing the insufficient number of security personnel in Japan as well as the lack of proficiency of such personnel. For example, NTT Group takes part in cross-industry training initiatives, holds the "Cyber-attack and Cyber-defense Technologies" course at Waseda University, and is a member of the Security Camp Committee and ICT-ISAC Japan, a collaborative organization utilizing ICT for sharing and analyzing information. We also implement various other initiatives to help train security personnel across Japan. In 2017, the Cross-Industry Committee on Cybersecurity

and levels of security personnel needed. As a result, the number of security personnel holding internal certifications reached approximately 39,000 on April 30, 2018. We will continue to enhance our range of ever-more practical development programs to increase the number of personnel capable of functioning as the core of our security field operations.

Personnel Development, which operates and performs cross-

industry collaborative ventures with companies in important

industry fields, was transformed into an organization with cor-

porate status. This move was taken to allow it to better address

cyberthreats on an industry-wide basis by stepping up initiatives

for cultivating security management personnel, fostering under-

standing among management, and sharing its expertise.

Cross-Industry Committee on Cybersecurity Personnel Development website (Japanese only)

http://www.cyber-risk.or.jp/index.html

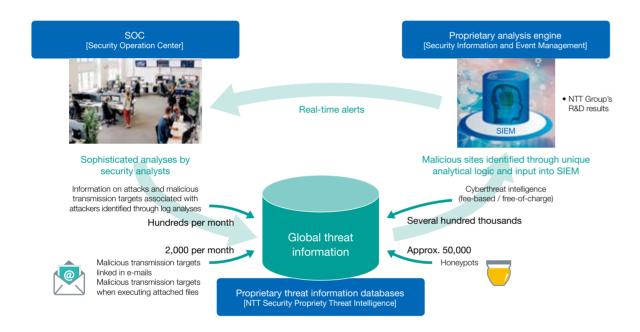
diverse threats

Initiatives for Supporting Customers in Reinforcing Information Security

Development of Security Services Operations through NTT Security Corporation

NTT Security functions as NTT Group's center of excellence for cybersecurity by coordinating with Group companies and offering multifaceted information security support for customers' digital transformations through consulting and other services. The information gained through daily security operations around the world and the information collected through so-called honeypot decoy systems is integrated and utilized via our proprietary threat information databases. In addition. NTT Security is able to provide sophisticated cybersecurity threat detection and

response services 24 hours a day, 365 days a year by taking advantage of its advanced, proprietary Security Information & Event Management (SIEM) analysis engine, which incorporates the technologies developed at research facilities, and its highly skilled security analysts. Furthermore, our sophisticated managed security services are supplied around the world and operated efficiently through an integrated global service platform. With 10 security operation centers staffed by security analysts in locations across the globe, NTT Security provides services that are flexibly adjusted to the characteristics of each region.



Cutting-Edge Solution Case Study:

Industrial Control System Security Solutions NTT Group has begun providing cutting-edge security solutions that are compatible with industrial control systems and IoT technologies, in response to the rising threats to cybersecurity pertaining to important infrastructure, factories, plants, and building

automation systems spurred by the spread of the IoT. Looking ahead, we will assemble dedicated teams for supplying industrial control system security solutions around the world and develop structures that allow for the integrated provision of offerings spanning from security assessments to managed security services as we seek to address customers' security issues.



Disaster Countermeasures

Stable and Reliable Telecommunications Services in Preparation for Large-Scale Disasters NTT Group has defined three key themes for disaster countermeasures-improving communications network reliability, securing critical communications systems, and promptly restoring telecommunications services. We have been strengthening efforts based on these themes since the Great East Japan Earthquake.

Specifically, we are taking measures to improve the reliability of our telecommunications infrastructure. To ensure that our telecommunications services operate without interruption at all times, we employ transmission trunk line multi-routing, have enacted blackout countermeasures for communications buildings and base stations, and are making communications buildings more disaster resistant. In addition, we are expanding the assortment of power supply vehicles and other disaster response equipment that we have positioned throughout Japan and are continuously conducting training to prepare for major natural disasters. Furthermore, we are making a daily effort to guarantee that, in the event of a disaster, we are able to immediately set up a Disaster Countermeasures Office and other emergency preparations and make the necessary emergency and critical communications as a public institution as designated by the Basic Act on Disaster Control Measures.

In the fiscal year ended March 31, 2018, no serious telecommunications disruptions*1 occurred at four telecommunications business companies (NTT East, NTT West, NTT Communications, and NTT DOCOMO), while service stability was maintained at 100.00%*2, under normal circumstances.

- *1 Number of disruptions that led to a stop of or lowered the quality of telecommunications services and that fulfill the following conditions:
 - Voice services usable for emergency reports (110, 119, etc.): Service impacted for more than one hour with more than 30,000 people affected • Voice services not usable for emergency reports: Service impacted for more than two hours with more than 30,000 people affected or service impacted for more than one hour with more than 100.000 people affected
 - Internet-related services (free): Service impacted for more than 12 hours with more than 1,000,000 people affected or service impacted for more than 24 hours with more than 100,000 people affected
- hours x 365 days)] x 100%

NTT Group's Basic Policy on Disaster Countermeasures



Securing critical communications systems

Securing 110, 119, 118, and other emergency services and critical communications; installing emergency-use public phones; and providing safety status checking services when disasters strike, etc.

Countermeasures strengthened since the Great East Japan Earthquake

 Measures for securing critical communications · Early resolution of communications blackouts • Enhancements of disaster message services Further Information Station implementation

Promptly restoring telecommunications services

restoration purposes, etc Countermeasures strengthened

since the Great East Japan Earthquake Building up of stock of disaster response

equipment Enhancement of organization for disaster countermeasure operations Exercises and practice for a major earthquake • Training of crisis management personnel and sharing of knowledge and skills

Support for Customers' Post-Disaster Restoration of **Operations and Business Continuity**

NTT Group has continued to provide telecommunications services in Japan, which cannot be allowed to be interrupted in the event of a disaster, for over 100 years. We are leveraging our track record of reliability and the associated expertise accumulated over our history to develop a solution business for supporting customers in maintaining business continuity. We anticipate significant business opportunities to arise in this regard going forward.

Damage from natural disasters, such as heavy rains and more frequent typhoons, is becoming increasingly common due to recent climate change. As a result, there is a growing risk of water and lightning damage and power outages, which

• Other services: Service impacted for more than two hours with more than 30,000 people affected or service impacted for more than one hour with more than 1,000,000 people affected *2 [1 - total hours under the impact of serious disruptions (number of affected users × hours of serious disruptions) / total hours of maior service provision (number of users × 24

Promptly restoring services by utilizing disaster response equipment and procuring materials, equipment, and manpower for

Improving communications network reliability

Building facilities resilient to earthquakes, fires, storms, floods, and other disasters; conducting transmission trunk line multi-routing; monitoring and controlling network round the clock: etc.

Countermeasures strengthened since the Great East Japan Earthquake

- Enhanced disaster resistance (damage prediction. hazard map utilization)
- Stable provision of communications services (improvement of trunk line reliability, etc.)

now threaten to cause extensive damage should they occur. Many companies need to take measures to ensure that, if emergency situations such as disasters occur in the future, the organizations are able to continue important operations and restore order quickly. These measures are necessary to provide support to disaster victims and facilitate swift recovery.

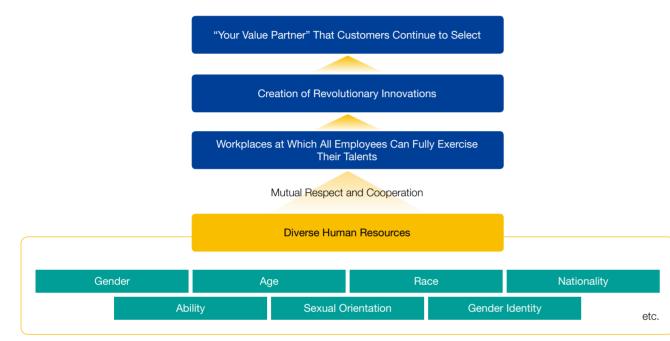
For this reason, NTT Group strives to provide support to help customers restore operations and maintain business continuity after disasters. To this end, we are developing business continuity solution operations across a wide range of fields, including data center services and cloud services, an area where service is provided by NTT Communications and NTT DATA, and building and electricity technologies, an area where service is provided by NTT FACILITIES.

Initiatives for Addressing Material Issues 3

Development of Frameworks for Encouraging of Participation by Diverse Human Resources



NTT Group recognizes that respecting the diverse values and characteristics of its employees and enabling them to realize their full potential are crucial if the Group is to become "Your Value Partner" that customers continue to select by responding to rapidly changing markets and diversifying customer needs. We believe diversity has the power to give rise to revolutionary innovations. For this reason, we have positioned diversity and inclusion as important parts of our management strategies, and we are developing frameworks to encourage participation by diverse human resources accordingly. We also realize that, together with system reforms, ICT services are an effective means of facilitating diverse work styles. NTT Group has declared its goal of addressing social issues by undertaking its own digital transformation and supporting the digital transformations and work style reforms of customers.

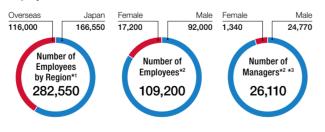


Promotion of Diversity

Aiming to become "Your Value Partner" that customers continue to select, NTT Group has positioned diversity and inclusion as important elements of its management strategies. We thereby aim to enhance our powers of innovation and corporate strengths by being receptive toward and utilizing diverse human resources. To this end, we are endeavoring to establish workplaces at which a diverse range of people can actively participate, regardless of their gender, age, race, nationality, ability, sexual orientation, or gender identity. In October 2007, the Diversity Management Office was established at NTT, the holding company, and by April 2008 diversity promotion supervisors were in place at Group companies. Since that time, the Diversity Management Office and diversity promotion supervisors have worked together to assist employees' work-life management efforts, provide career development support for our diversifying employee base, and conduct educational activities aimed at reforming the corporate culture. In addition, discussions on diversity within the Group are included in the training curriculum for senior managers, which is administered regardless of nationality. We thereby aim to help encourage participation by diverse human resources throughout the Group.

We also hold annual diversity promotion conferences to enable individual Group companies to share their initiatives with the whole NTT Group, and we monitor female manager ratios, the status of the hiring of persons with disabilities, and other numerical diversity management indicators.

Employment Data



^{*1} Estimated number of employees of 922 consolidated companies for NTT Group as of March 31 2018

*2 As of March 31, 2018, total number of employees of NTT, directly affiliated companies in Japan, and their affiliated companies in Japan (total of 38 companies) *3 Section manager level or higher

Diversity Initiatives 1: Empowerment of Women in the Workforce

To help empower women in the workforce. NTT Group takes steps to nurture female leaders, support the balancing of work with child-rearing, and conduct other measures based on the circumstances at each Group company. As one initiative for guiding these efforts, we formulated and announced a plan to double the ratio of our female managers at the level of section manager or above in Japan, seeking to increase this ratio from the level of 2.9% in the fiscal year ended March 31, 2014, to 6.0% by the fiscal year ending March 31, 2021. We have since intensified efforts to train and promote female employees to management positions in 38 NTT Group companies.* In the fiscal year ended March 31, 2018, women occupied 5.1% of management positions and comprised 34.1% of new graduates joining NTT Group, representing smooth progress toward the accomplishment of this plan. Furthermore, NTT East, NTT West, NTT Communications, NTT DATA, and some Group companies have received the highest rating (Rank 3) in the "Eruboshi" certification mark program for recognizing excellent companies under the Act to Promote the Active Participation of Women in the Workplace, which took effect in April 2016.

NTT Group companies also provide career development training for female employees, which includes curricula entailing exchanges with other companies, and hold joint forums and training sessions with the aim of cultivating female managers. * 38 NTT Group companies; NTT, companies in Japan directly controlled by NTT, and their major subsidiaries (59 companies at the time of plan formulation, 38 companies at present)

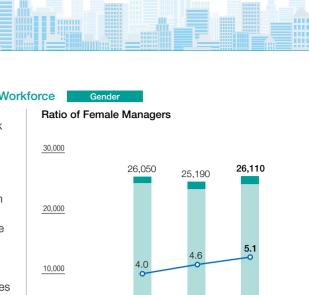
Diversity Initiatives 2: Employment of Non-Japanese Individuals and Cultivation of Global Leaders

NTT Group develops a global business. We are therefore committed to creating workplaces where diverse human resources can realize their full potential, irrespective of race or nationality, and to cultivating global leaders.

We apply the same conditions to the hiring and promotion of non-Japanese employees as we do when hiring and promoting our Japanese employees, and we allow non-Japanese candidates to conduct their interviews or give presentations in English. Of the 1,694 people hired by major NTT Group companies

Diversity Initiatives 3: Consideration for Members of the LGBT Community and Other Sexual Mind Sexual orientation Gender identity

NTT Group endeavors to develop its organization and realize a This index is compiled by work with Pride to recognize initiatives society in which everyone can live and work based on who they by companies for supporting the LGBT community and other are, regardless of their sexual orientation or gender identity. To sexual minorities. this end, we are adopting various systems and cultivating workplace awareness. In April 2018, we further expanded the applicability of our systems and made all systems pertaining to spouses applicable to all same-sex partners in relationships with employees that are similar to spousal relationships. In addition, we have held LGBT sensitivity seminars targeting all managers of the holding company. The approximately 1,000 participants in these seminars listened to lectures by members of the LGBT community and took part in role-playing, which has contributed to improving workplace awareness. As a result of these efforts, 13 NTT Group companies were recognized in PRIDE INDEX 2017, receiving the highest rating of gold.



2016

Male managers Female managers - Ratio of female managers

and their major subsidiaries (38 companies at present)

Notes: 1. Numbers of managers at NTT, companies in Japan directly controlled by NTT,

2. Ratio of our female managers at the section manager level or above in Japan

Fiscal year ende

-	in Japan in the fiscal year ended March 31, 2018, 57 (3.4%)
3	were non-Japanese.
,	In addition, we implement the Global Leadership Develop-
	ment Program Leadership Excellence and Accelerating Diversity
of	(GLDP LEAD) to provide opportunities for senior managers in
Ig	Japan and overseas to acquire leadership skills in higher-level positions. The aim of this program is to promote the contribu-
	tions of global leaders. In 2018, 30 individuals participated, 10
s	of whom were Japanese and 20 of whom were non-Japanese.
e I G	BT Community and Other Sexual Minorities



2018

Leave Systems	Honeymoon leave, condolence leave, leave related to birth by partner, childcare leave, leave for caring for partner or members o partner's family, etc.
Compensation Systems	Dependent support aid, stipend for working away from home, etc
Welfare Systems	Monetary payments and telegrams to congratulate or offer condo lences to employees, access to company dormitories, etc.

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ESG

(%)

12

Diversity Initiatives 4: Expansion of Employment of Persons with Disabilities Ability

NTT Group has established special-purpose subsidiaries* to actively recruit persons with disabilities and expand hiring opportunities for them while also endeavoring to create pleasant workplaces. As of June 30, 2018, the ratio of persons with disabilities at NTT was 2.6%. For major NTT Group companies

in Japan, this ratio was 2.5%, while the entire Group had a ratio of 2.3%

* Subsidiaries that give special consideration to the employment of persons with disabilities in order to promote and stabilize the employment of persons with disabilities

The following is an explanation of the initiatives of NTT CLARUTY CORPORATION, one of NTT's special-purpose subsidiaries.

Initiatives at Special-Purpose Subsidiary NTT CLARUTY

NTT CLARUTY engages in initiatives that utilize the unique capabilities of persons with disabilities, including performing web accessibility diagnoses and training and providing consulting regarding the employment of persons with disabilities. In addition, persons with disabilities take part in certain areas of NTT Group's value chain, including equipment-related work at NTT East.

Moreover, NTT CLARUTY has taken several steps to enhance its workplaces in order to accommodate the unique needs of persons with disabilities. Such steps include the following.

- Meeting materials are distributed in advance to ensure that individuals with visual and/or hearing impairments are able to fully understand these meetings. In addition, speakers refrain from using acronyms and demonstratives to ensure clarity while endeavoring to use simple expressions.
- Procedures are modularized to improve work efficiency and clear instructions are provided.
- · Work procedures are designed to utilize the unique capabilities of persons with disabilities.

The practice of implementing measures and exercising consideration to accommodate the needs of all employees is not only viable at workplaces employing persons with disabilities but also in the management of other NTT Group companies. We frequently have employees from other Group companies tour NTT CLARUTY with the hopes that this company's receptiveness toward diversity and its management practices will contribute to awareness reforms at these companies.



Promotion of Work Style Reform Initiatives

NTT Group seeks to create new value through innovation. In order to accomplish this goal, there is a strong need for all employees to break away from traditional work styles to exercise greater levels of independence and creativity. We are also aware of the importance of cultivating a deeper understanding of work-life management throughout workplaces and fostering a corporate culture that is accepting of diverse work styles. From this standpoint, in June 2017 NTT Group made a work style reform declaration, which represented the shared sentiments of all NTT Group managers and employees. We are currently pursuing improvements in overall work processes together with business partners while implementing work style and leave habit reforms and advancing initiatives for helping employees maintain good physical and mental health and for encouraging self-transformation among individuals.

Work Style Reform Initiatives 1:

Promotion of Use of Working-from-Home System Work Styles

We are reforming the work styles of all NTT Group employees and actively promoting the use of the working-from-home system and other teleworking systems as well as flextime systems as an ICT provider. We thereby aim to realize more efficient and flexible work styles. NTT Group participated in the Telework Days event that took place in July 2018. During this event, more than 15 thousand employees from across various Group companies* utilized teleworking and other systems to experience flexible work styles. To reduce security risks pertaining to teleworking, we integrated NTT Group's security platforms to provide a teleworking environment through a private cloud service. * NTT. NTT East, NTT West, NTT Communications, NTT DATA, NTT DOCOMO, NTT COMWARE, and NTT FACILITIES

Work Style Reform Initiatives 2: Encouragement of Employees to Take Leave Types of Leave

We encourage employees to take extended periods of leave in conjunction with holidays, such as Golden Week, end-of-year and New Year holidays, and summer vacation. Other measures to facilitate leave acquisition include implementing more lenient guidelines for counting paid leave consumption in order to mak it easier for employees to take so-called life plan leave for purposes such as childcare, long-term care of family members, or volunteer activities. As one facet of our efforts to promote

Work Style Reform Initiatives 3: Promotion of Childcare and Family Care Support Systems Work Styles Types of Leave NTT Group supports its employees in raising children or providing childcare support services. In addition, we introduced the new Family Care Concierge program that assists employees in providing long-term care to family members by matching them with care managers and offering other consulting services. Childcare and Family Care Support Systems In 2018, we have greatly expanded our lineup of welfare systems childcare and family care support systems. For childcare support, 2016/3 1,112 59 1,864 96.2% 55 37 2017/3 1.139 82 1,962 98.0% 42 41 2018/3 1,147 120 2,079 97.1% 65 51 searching for day care services based on employees' addresses, while also bolstering our lineup of financial assistance and other * Data collected for NTT (non-consolidated)

long-term care to family members by offering a wide range of systems that can be used by both men and women. Ongoing improvements are implemented to these systems from the perspective of promoting the contributions of diverse human resources and based on employee needs and social expectations. to create the NTT Benefit Package, a comprehensive lineup of we launched Childcare Concierge, a program that offers aid in

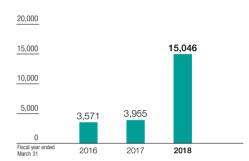
Our efforts are not limited to enhancing the systems available within NTT Group. Seeking to help people struggling to balance their work with raising children across society, NTT Urban Development Group established WAINA Kids, a companyoperated day care facility. Through this facility, we aid companies



NTT Group's Work Style Reform Declaration



Use of Working-from-Home System



S	
ke	

proactive leave acquisition by managers and all other NTT Group employees, managers are implementing the Value-Up Friday campaign, which recommends that employees acquire at least a half-day of leave on one or more Fridays each month. In the fiscal year ended March 31, 2018, the average number of paid leave days taken at major NTT Group companies in Japan was 19.0 days, and the utilization ratio for paid leave was 95.0%.

looking to utilize diverse employees while supporting parents seeking to achieve a balance between work and child-rearing. kids 保育团

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Improvement of Procedures for Developing, Evaluating, and Assigning Human Resources

NTT Group coordinates procedures for developing, evaluating, and assigning human resources to create a workplace environment in which all employees can find motivation.

Human Resource Development

NTT Group is committed to establishing human resource development systems that enable all of its employees to make the most of their abilities through their work and deliver high value.

Employees formulate their own career plans based on the special skills necessary for each iob. Skills are then improved through the implementation of the plan-do-check-act (PDCA) cycle. At Group companies, we have taken steps to establish a variety of systems related to human resource development, such as instituting a framework for defining specialized fields in line with business characteristics and work details and certifying skills.

Support for Training to Improve Capabilities

In addition to group training and on-the-job training for enabling employees to gain necessary skills in their respective fields of business, we provide many other opportunities for employees who are eager to get ahead, including distance learning, e-learning, in-house certification of skill levels to evaluate the results of educational programs, and support for acquiring qualifications.

Furthermore, we actively support employee career development in various ways, including having superiors meet with their subordinates at the start of the year, mid-year, and year-end to discuss career plans and review performance, and providing management training to employees tapped for promotion. We also offer a training curriculum for cultivating experts in the security field in order to respond to the recent rise in security risks. To develop future management leaders, we have selected approximately 350 individuals from the executive manager and section manager levels to take part in a training curriculum meant to help participants develop leadership skills and engage in interpersonal exchanges. With an eye to the globalization of the Group's business, we also send employees to study at overseas graduate schools or participate in overseas work experience programs in order to nurture personnel capable of performing in the global market.

Human Resource Assignment

NTT Group's businesses extend over a wide range of areas. To smoothly advance these various businesses, it is important to assign the right person to the right job so that all employees can work to their full potential. From this perspective, we implement periodic human resource rotations with consideration for each employee's skills development status and career plan.

In-House Recruitment Program

We raise motivation and promote networking within the Group by providing ambitious employees with opportunities to seek new challenges in a wide range of fields through our NTT Group Job Challenge in-house recruitment program. In recent years, to raise the number of employees across the whole Group who are capable of working globally, we have been actively providing opportunities for employees to transfer to global posts by creating new global posts and increasing recruit numbers. In the fiscal year ended March 31, 2018, 477 employees used the Job Challenge program, with 188 transferring as a result to their desired workplace.



Employee Satisfaction

NTT Group regularly conducts surveys of employees and uses the results to improve working environments. Results of the survey conducted in the fiscal year ended March 31, 2018, showed the level of overall employee satisfaction at 3.79 out of 5.00 points.

Fiscal years ended March 31		2016	2017	2018
Employee satisfaction (Out of 5.00 point	s)	3.88	3.83	3.79

Employee Evaluations

NTT Group operates an in-house qualification system that puts priority on performance and sets behavior and performance targets tailored to each qualification rank. Our human resource management systems are designed to encourage employees to think and act for themselves in the execution of their work duties through the steady and effective implementation of an evaluation process that incorporates everything from the setting of targets to the provision

Fair Personnel Evaluation System

Rather than having each company implement their own mechanisms for human resource management and development, we institute an all-inclusive system for managing employee assignment, skills development, evaluation, rating, and compensation, centered on a qualification system that indicates our expectations in terms of behavior and performance of each employee. Proper evaluation requires a sound understanding of the principles and content of our human resource management systems and appropriate execution of the subsequent processes of target setting, daily communication, evaluation, and performance reviews. To achieve these types of evaluations, we adhere to the following cycle. The evaluation system applies to 60% of NTT Group companies, including companies outside of Japan.

> Meetings between subordinates and superiors Evaluator Finalization of Evaluation Feedback meetings evaluation

Human Resource Management and Salary Systems

In October 2013, we reconstructed our human resource management and salary systems. The new systems, which reflect the distinctive business characteristics of NTT Group, are designed to better reward employees who perform the roles and produce the results expected of them by introducing evaluation-based compensation and expanding results-based awards.

Turnover Rate

We collect data on the turnover rate at major NTT Group companies in Japan (including their affiliated companies). In the fiscal year ended March 31, 2018, the turnover rate was 6.4%.* The average length of service was 19.18 years for male employees and 12.80 years for female employees.

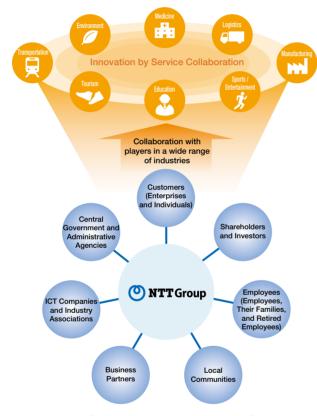
* Including employees retiring at the mandatory retirement age

NTT Group's Basic Policy for Stakeholder Engagement

Basic Policy

With its ever-more global and complex value chain, NTT Group provides products and services to a diverse range of stakeholders across the globe. These stakeholders have a wide variety of needs and expectations regarding our operations. Stakeholder engagement serves as a means of understanding and taking into consideration the needs and expectations of our stakeholders in the way we conduct our business. With regard to environmental and social issues, in particular, incorporating stakeholder input to the greatest degree possible is a way of earning social trust, increasing competitiveness, and exercising accountability. Through appropriate stakeholder engagement, NTT Group strives to achieve sustainable growth together with its stakeholders. Of course, all engagement activities are conducted in accordance with relevant laws, regulations, and legal requirements.

Contributing to the Resolution of Environmental and Social Issues



Sustainable Growth Together with Stakeholders

NTT Group's Primary Approach to Major Stakeholders

NTT Group conducts business in Japan and overseas. To increase business sustainability, NTT Group operates its business in an integrated, Groupwide manner while focusing on the expectations and needs of its various stakeholders.

Customers (Enterprises and Individuals)

All customers, both enterprise and individual, who use services provided by NTT Group

NTT Group's Approach

Aiming to be selected by customers as a "Value

an even higher awareness of CSR to provide safe.

secure services that are high in quality and conve-

Partner" each individual employee will strive for

Examples of Engagement

Venues for customer inquiries Conducting of customer satisfaction surveys Utilization of websites and social media Publication of yearly reports (Annual Reports, etc.)

Reasons for Engagement

NTT Group endeavors to understand customer needs and perspectives in order to provide customers with higher-quality products and services and thereby increase customer satisfaction while at the same time striving to become a "Value Partner" to customers.

Shareholders and Investors

Individual and institutional investors, including the shareholders and creditors of NTT Group

NTT Group's Approach

We will return profits to shareholders while maintaining a sound financial standing and enhancing our corporate value. We will also endeavor to disclose information related to the Group in a timely, fair, and impartial manner.

results announcements Explanatory presentations for individual investors Publication of yearly reports (Annual Reports, etc.)

Employees (Employees, Their Families, and Retired Employees)

Employees who work at NTT Group, their families, and retired employees who support NTT Group's CSR ideals

NTT Group's Approach

We will advance various employee initiatives to create safe and healthy workplaces in which everyone can realize their full potential and be rewarded in their work and daily lives. We will also value communication with retired employees. Regular interviews Communication between management and employees CSR conferences

Local Communities

People in local communities who are connected to us through the core businesses of NTT Group companies

NTT Group's Approach

We will advance alongside local communities by making social contributions and implementing disaster countermeasures through our business activities

contribution activities Donations, sponsorship, and other support

Business Partners

Business partners who provide a range of cooperation in the provision of NTT Group services

NTT Group's Approach

We will aim to work together to create and roll out services to resolve a variety of social issues

Examp Creation of inquiry Disclosure of proc auidelines, etc. Surveys for suppl Explanatory prese

ICT Companies and Industry Associations

NTT Group's Approach	Example
We will engage in discussions on the direction and initiatives for the information and telecommunica- tions industry, not only in Japan but also from a global perspective, and seek to address diverse social issues together.	 Entry into industry Participation in cor

Central Government and Administrative Agencies

Central and local governments that make policy decisions on information and telecommunications, employment and the economy, the environment, and other issues

We will fulfill our responsibility as an information and telecommunications company by adhering to the policies of the central government, administrative agencies, and local governments.

NTT Group's Approach

Compliance with laws and regulations Suggestions for government policy Participation in public-private partnership projects

nient from the customer's standpoint

Examples of Engagement

General Meetings of Shareholders, financial

Explanatory presentations for institutional investors

Reasons for Engagement

By communicating with shareholders and other investors we provide information necessary for investment decisions and help ensure that the Group is properly evaluated. We also utilize input received through interactions in Group management.

Examples of Engagement

Conducting of employee satisfaction surveys

Groupwide Corporate Ethics Help Line

Reasons for Engagement

By creating safe and healthy workplaces and providing lifestyle support for employees, we hope to enable them to realize their full potential and to go about their work while remaining highly aware of CSR.

Examples of Engagement

Support and collaboration through social

Negotiation with local community residents when constructing or installing equipment Reasons for Engagement

Through engagement, we strive to contribute to the development of enriched local communities and also to understand the issues faced by communities in order to make social contributions and implement disaster countermeasures.

les of Engagement	Reasons for Engagement
y forms curement policies and	Engagement with business partners helps us pro- cure products that take into account the environ- ment, human rights, and other issues and build
liers entations for suppliers	fair partnerships to exercise CSR and continue growing together with our business partners.

Other ICT companies and people in industry associations who are striving to develop information and telecommunications

es of Engagement

associations mmittees, etc.

Reasons for Engagement

Through discussions on the direction and initiatives for the information and telecommunications industry, we will invigorate the entire industry and contribute to society through telecommunications development and advancement

Examples of Engagement

Reasons for Engagement

We aim to conduct appropriate business activities while adhering to the policies of the central government and local governments and to help resolve the social issues faced by the central government and local governments

By reinforcing corporate governance, NTT is building foundations to support improvements in corporate value.

Overview of Corporate Governance System

Basic Policy

NTT strives to meet the expectations of various stakeholders, including its shareholders and other investors as well as customers, business partners, and employees. The Company also recognizes the need to strengthen its corporate governance system based on the intent of the principles of Japan's Corporate

Governance Code. NTT seeks to accelerate the process of self-transformation to "Your Value Partner" and to realize its basic policies of ensuring sound management, executing appropriate decision-making and business activities, clarifying accountability, and maintaining thorough compliance.

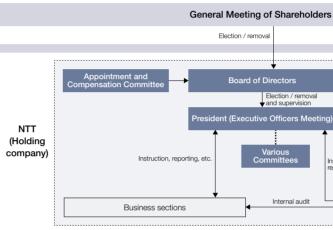
Overview of Enhancing Corporate Governance System

Since its founding in 1985. NTT Group has continued to enhance its corporate governance system through means such as the appointment of several outside Members of the Board. Over the years, we have proceeded to reinforce business execution, supervision, and internal control systems. Recent initiatives have included a focus on developing a framework that appropriately supports the exercise of voting rights by shareholders.

Major Revisions of Laws and Regulations Related	2004 Establishment of TSE's corporate governance principles for listed companies	2006 Enforcement of Companies Act 2007 Enforcement of Financial Instruments and	2015 Enforcement of revised Companies Act Enforcement of TSE's Corporate Governance
to Corporate Governance	-2005	Exchange Act -2010	Code -2017
Business Execution / Supervision Systems	 1985 • Establishment of NTT, appointment of several outside Members of the Board 2003 • Increase in number of Audit & Supervisory Board Members: from 4 members (2 inside members, 2 outside members) to 5 members (3 inside members, 2 outside members) 2005 • Establishment of Appointment and Compensation Committee 	 2006 Increase in number of outside Audit & Supervisory Board Members: from 5 members (3 inside members, 2 outside members) to 5 members (2 inside mem- bers, 3 outside members) Appointment of financial expert as Audit & Supervisory Board Member 	 2011 • Appointment of first female corporate officer (1 outside Audit & Supervisory Board Member) 2015 • Establishment of independence standards for independent Members of the Board and independent Audit & Supervisory Board Members
Internal Control / Risk Management	 2002 • Establishment of Business Risk Management Committee • Establishment of NTT Group Corporate Ethics Charter • Establishment of Corporate Ethics Committee • Establishment of Groupwide Corporate Ethics Help Line 2005 • Establishment of Internal Audit Office 	 2006 • Establishment of Internal Control Office Consolidation of Internal Audit Office Establishment of Basic Policy for the Development of Internal Control Systems 2010 • Establishment of Risk Management Rules 	 2015 • Revision of Basic Policy for the Development of Internal Control Systems 2016 • Commencement of disclosing information on operation (overview) of internal control systems
Ensuring the Exercise of Shareholder Voting Rights	2002 • Implementation of electronic voting for exercise of rights	2006 • Introduction of ICJ's electronic voting platform for institutional investors	 2012 Commencement of providing notes to non-consolidated financial statements, etc., over Internet 2016 Commencement of Internet disclosure of Notice of Convocation prior to mailing (same day for Japanese- and Englishlanguage versions, 42 days before date of Ordinary General Meeting of Shareholders) Expansion of Internet disclosure of information 2017 Commencement of Notice of Convocation distribution in format compatible with smartphones
Information Disclosure	 2003 Commencement of disclosure of quarterly information Establishment of disclosure regulations Establishment of Disclosure Committee Establishment of IR Office Establishment of CSR Promotion Office / Committee Commencement of issuance of CSR reports 	 2006 • Commencement of disclosure of Corporate Governance Report 2010 • Publication of disclosure policy 	 2014 Commencement of issuance of integrated reports 2015 Commencement of disclosure of Corporate Governance Report in response to Corporate Governance Code Commencement of issuance of sustainability reports

Corporate Governance System

NTT, in order to strengthen functions for appropriately supervising business execution, appoints several outside independent Members of the Board and has established the Audit & Supervisory Board, of which outside independent Audit & Supervisory Board Members make up a majority to strengthen its auditing system. Additionally, NTT has voluntarily established the Appointment and Compensation Committee, which consists of four members, including two outside independent Members of the Board, to further increase the objectivity and transparency of decisions related to appointments and compensation.



■ Board of Directors Number of meetings in the fiscal year ended March 31, 2018: 12 → See page 58 for details The Board of Directors consists of 12 Members of the Board, including two outside independent Members of the Board. In principle, the ordinary meetings of the Board of Directors are held once per month. In addition, extraordinary meetings are held as needed. The Board of Directors makes decisions on matters stipulated by law and on important matters related to corporate management and Group management. Moreover, through such means as periodic reports from Members of the Board on the status of the execution of members' duties, the Board of Directors supervises the execution of duties by Members of the Board. The members of NTT's Board of Directors are elected based on having a high level of integrity and insight.

■ Audit & Supervisory Board Number of meetings in the fiscal year ended March 31, 2018: 22 → See page 64 for details

The Audit & Supervisory Board consists of a total of five Audit & Supervisory Board Members, comprising two internal Audit & Supervisory Board Members (one of whom is female) and three outside independent Audit & Supervisory Board Members (one of whom is female). From an independent perspective that differs from that of individuals responsible for business execution, the Audit & Supervisory Board implements operational audits and accounting audits and audits the status of the execution of duties by Members of the Board.

Appointment and Compensation Committee Number of meetings in the fiscal year ended March 31, 2018: 1

For the purpose of improving objectivity and transparency in the decisions regarding appointments and compensation of Members of the Board, NTT has established on a non-statutory basis the Appointment and Compensation Committee, which consists of four Members of the Board, including two outside independent Members of the Board, as a preliminary review institution of the Board of Directors.

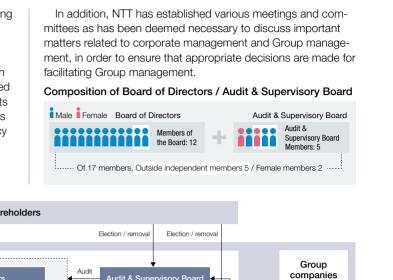
Executive Officers Meeting Number of meetings in the fiscal year ended March 31, 2018: 33

Important corporate matters to be decided are, in principle and in advance, discussed by the 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 is held about once a week. To improve the transparency of management decision-making, one Audit & Supervisory Board Member participates in the Executive Officers Meeting.

Various Committees

A number of committees have been established below the Executive Officers Meeting to discuss specific issues related to corporate and Group management strategies. Major committees include the Technology Strategy Committee, which deliberates on the Group's R&D vision and technology development strategy; the Investment Strategy Committee, which examines investment projects that are larger than a certain scale; and the Finance Strategy Committee, which discusses basic financial strategies and financial issues. These committees, which are convened as necessary throughout the year, are, in principle, chaired by the president or a senior executive vice president and are attended by relevant Members of the Board and others.

More information on the Company's committees can be found on NTT's corporate website. http://www.ntt.co.jp/ir/mgt_e/governance/01.html





Support Office of Audit &

Accounting audit

Supervisory

Board Members

Cooperati

Independent Auditor

Internal Control Office

Cooperat

Coordinat



Board of Directors

Members of the Board (As of June 30, 2018)

Senior Vice President Member of the Board

Ryota Kitamura Head of Corporate Strategy Planning Eiichi Sakamoto Head of General Affairs

Senior Vice President Member of the Board

Hiroki Kuriyama Head of Strategic Business Development In charge of 2020 Project

Senior Vice President

Member of the Board

Senior Executive Vice President Representative Member of the Board

Motoyuki li In charge of technical strategy and

international standardization

Senior Executive Vice President Representative Member of the Board

Akira Shimada

In charge of business strategy and risk management

Executive Vice President Member of the Board

Tsunehisa Okuno Head of Global Business



Outside Independent Member of the Board

Katsuhiko Shirai

Director of Japan Display, Inc.

Chairman of the Board

President and Chief Executive Officer Representative Member of the Board

Hiromichi Shinohara

Jun Sawada

Senior Vice President Member of the Board

Takashi Hiroi

Head of Finance and Accounting

Senior Vice President Member of the Board

Katsuhiko Kawazoe

Head of Research and Development Planning



Strategy

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Outside Independent Member of the Board

Sadayuki Sakakibara

Special Adviser of Toray Industries, Inc.

Background and Experience of Members of the Board



Hiromichi Shinohara Date of Birth: March 15, 1954 Chairman of the Board Years Served as Member of the Board:

Shares Owned: 17 400 Number of Meetings Attended (Percent) 12/12 (100%)

Akira Shimada

Senior Executive Vice President

Chief Financial Officer

Company

8.804

Shares Owned:

12/12 (100%)

Chief Compliance Officer

Date of Birth: December 18, 1957

In charge of business strategy and risk

management Representative Member of the Board of the

Years Served as Member of the Board:

Number of Meetings Attended (Percent)

Background and Experience Apr. 1978: Joined Nippon Telegraph and Telephone Public Corporation

- Jun 2009: Senior Vice President Head of Research and Development Planning Member of the Board of the Company
- Jun 2011: Senior Vice President Head of Research and Development Planning Head of the Information Sharing Laboratory Group Member of the Board of the Company
- Oct. 2011: Senior Vice President Head of Research and Development Planning Member of the Board of the Company

Jun. 2012: Executive Vice President Head of Research and Development Planning Member of the Board of the Company Jun. 2014: Senior Executive Vice President Head of Research and Development Planning

epresentative Member of the Board of the Company Jun. 2018: Chairman of the Board of the Company (present post)

Background and Experience Apr. 1981: Joined Nippon Telegraph and Telephone Public

Jul. 2007: General Manager of the Accounts and Finance

Jun. 2007: Vice President of Corporate Strategy Planning of the

Jul. 2009: General Manager of the General Affairs and Personnel

1. 2011: Senior Vice President General Manager of the General Affairs and Personnel

Member of the Board of Ninnon Telegranh and

elephone East Corporation

Head of the General Affairs Member of the Board of the Company

Department of Nippon Telegraph and Telephone West

Department of Nippon Telegraph and Telephone East

Principal Concurrent Positions None

Corporation

Company

Corporation

Corporation

Departmen

Jun 2012 Senior Vice President

Jun. 2015: Executive Vice President

(present post)

Principal Concurrent Positions

Background and Experience

Corporation

the Company

(present post)

Jun. 2012: Senior Vice President

Jun. 2018: Executive Vice President

Principal Concurrent Positions

Director of NTT Security Corporation

Apr. 1983: Joined Nippon Telegraph and Telephone Public

Jun. 2008: Head of the Global Business Strategy Office of

Member of the Board of the Company

Jun. 2016: Director of NTT Security Corporation (present post)

Member of the Board of the Company (present post)

Jun. 2011: Head of Global Business of the Company

Head of Global Business

Head of Global Rusines

Senior Vice President of Dimension Data Holdings plc

Jul. 2007: Vice President of the Corporate Business Strategy of

Strategic Business Development of the Company Jan. 2011: Senior Vice President of Dimension Data Holdings plc

None

Head of General Affairs



Jun Sawada Date of Birth: July 30, 1955 President and Chief Executive Officer

Representative Member of the Board Years Served as Member of the Board:

Shares Owned: 13 600 Number of Meetings Attended (Percent)

12/12 (100%)



Motoyuki li Date of Birth: November 17, 1958 Senior Executive Vice President Chief Technology Officer Chief Information Officer Chief Digital Officer international standardization Head of Technology Planning Company



Tsunehisa Okuno Date of Birth: October 12, 1960 Executive Vice President Head of Global Business Member of the Board

Years Served as Member of the Board: Shares Owned: 5.500

Number of Meetings Attended (Percent) 12/12 (100%)



2. Number of meetings attended is for the fiscal year ended March 31, 2018.





Hiroki Kuriyama Date of Birth: May 27, 1961 Senior Vice President Head of Strategic Business Development In charge of 2020 Project Member of the Board Years Served as Member of the Board:

Shares Owned: 4 370 Number of Meetings Attended (Percent): 12/12 (100%)

Background and Experience Apr. 1978: Joined Nippon Telegraph and Telephone Public

- Corporation Jun. 2008: Senior Vice President
- Executive Manager of Corporate Strategy Planning Department
- Member of the Board of NTT Communications Corporation Jun. 2011: Executive Vice President Executive Manager of Corporate Strategy Planning Denartment
- Member of the Board of NTT Communications Corporation Jun. 2012: Senior Executive Vice President Executive Manager of Corporate Strategy Planning
- Department Representative Member of the Board of NTT Communications Corporation Jun. 2013: Senior Executive Vice President Representative Member of the Board of NT
- Communications Cornoration Jun. 2014: Senior Executive Vice President Representative Member of the Board of the Company
- Jun. 2018: President and Chief Executive Officer Representative Member of the Board of the Company (present post)

Principal Concurrent Positions

Background and Experience Apr. 1983: Joined Nippon Telegraph and Telephone Public Corporation Jun. 2011: Senior Vice President Executive Manager of the Plant Department of the Network Headquarters Executive Manager of the Planning Department of the Network Business Headquarte Member of the Board of Nippon Telegraph and Telephone East Corporation Jul. 2013: Senior Vice President Executive Manager of the Plant Planning Department of the Network Business Headquarters Member of the Board of Nippon Telegraph and Telephone

- East Corporation Jun. 2014: Senior Vice President Senior Executive Manager of the Corporate Sales Promotion Headquarters Member of the Board of Nippon Telegraph and Telephone Fast Cornoration Jun. 2015: Executive Vice President Senior Executive Manager of the Corporate Sales Promotion Headquarters Representative Member of the Board of Nippon Telegraph and Telephone East Corporation Jun 2016: Senior Executive Vice President
- Senior Executive Manager of the Corporate Sales Promotion Headquarters Representative Member of the Board of Nippon Telegraph and Telephone East Corporation Jul. 2017: Senior Executive Vice President
 - Headquarters Representative Member of the Board of Nippon Telegraph and Telephone Fast Corporation

Representative Member of the Board of the Company

Background and Experience Apr. 1985: Joined the Company

- Feb. 2003: Vice President of Department I of the Company
- May 2005: Vice President of Corporate Business Strategy of the
- Jun. 2008: Vice President of Corporate Strategy Planning of the
- Company Jun 2012: Vice President of President's Office of General Affairs
- of the Company Jun. 2014: Senior Vice President
- Head of Strategic Business Development Member of the Board of the Company (present post)

Principal Concurrent Positions





Background and Experience Apr. 1987: Joined the Company

Aug. 2003: Senior Research Engineer of the Cyberspace

Jul. 2008: Vice President of Research and Development Planning of the Company

Jul. 2014: Head of the Service Evolution Laboratories of the

Group of the Company

the Company

Laboratories of the Cyber Communications Laboratory Group of the Company

Service Innovation Laboratory Group of the Company

Member of the Board of the Company (present post)

Head of Research and Development Planning

Oct. 2007: Senior Research Engineer of the Cyber Solutions Laboratories of the Cyber Communications Laboratory

- Apr. 1986: Joined the Company May 2005: Vice President of Corporate Business Strategy of the
- Company Jun. 2008: Vice President of Strategic Business Development of
- the Comnany Jul. 2009: Vice President of Corporate Strategy Planning of the
- Company
- Jun. 2014: Head of Finance and Accounting of the Company Jun. 2015: Senior Vice President
- Head of Finance and Accounting Member of the Board of the Company (present post)

Principal Concurrent Positions

Takashi Hiroi

Date of Birth: February 13, 1963 Senior Vice President Head of Finance and Accounting Member of the Board

Years Served as Member of the Board:

Shares Owned: 3.800 Number of Meetings Attended (Percent): 12/12 (100%)



Jul 2016: Head of the Service Innovation Laboratory Group of Katsuhiko Kawazoe Jul. 2018: Senior Vice President Date of Birth: September 5, 1961 Senior Vice President Head of Research and Development Planning Principal Concurrent Positions

Member of the Board Years Served as Member of the Board:

Shares Owned: 600 Number of Meetings Attended (Percent): -/- (-%)



Katsuhiko Shirai Date of Birth: September 24, 1939 Outside Independent Member of the Board Years Served as Member of the Board:

Shares Owned:

3.800 Number of Meetings Attended (Percent): 11/12 (92%)

Engineering of Waseda University Apr. 1975: Professor of the Faculty of Science and Engineering of Waseda University Nov. 1994: Director of Academic Affairs and Director of the International Exchange Center of Waseda Universit Nov. 1998: Executive Director of Waseda University Nov. 2002: President of Waseda University Nov. 2010: Educational Advisor of Waseda University

Background and Experience

Apr. 2011: Chairperson of the Foundation for the Open University of Japan

Apr. 1965: Assistant of the First Faculty of Science and Engineering of Waseda University

Engineering of Waseda Unive

Apr. 1968: Full-Time Lecturer of the Faculty of Science and

Apr. 1970: Assistant Professor of the Faculty of Science and

Jun. 2012: Member of the Board of the Company (present post) Jun. 2012: Director of Japan Display, Inc. (present post)

Nov. 2016: Honorary Advisor of Waseda University (present post) Principal Concurrent Positions

Outside Director of Japan Display. Inc



- Member of the Board of the Company Jun. 2018: Senior Executive Vice President Representative Member of the Board of the Company Shares Owned 5,700
- In charge of technical strategy and Representative Member of the Board of the

Years Served as Member of the Board

Number of Meetings Attended (Percent): -/- (-%)

- - Senior Executive Manager of the Business Innovation Jun. 2018: Senior Executive Vice President Head of Technology Planning

(present post) Principal Concurrent Positions

Company



Eiichi Sakamoto Date of Birth: September 3, 1963 Senior Vice President Head of General Affair Member of the Board

Years Served as Member of the Board

Shares Owned: 3.400 Number of Meetings Attended (Percent): 12/12 (100%)



Rvota Kitamura Date of Birth: January 20, 1965 Senior Vice President Head of Corporate Strategy Planning Member of the Board Years Served as Member of the Board:

Shares Owned 1.500

Number of Meetings Attended (Percent): -/- (-%)

Background and Experience

- Apr. 1986: Joined the Company Oct. 2005: Head of the Business Management Group of the Corporate Strategy Planning Department of Nippon Telegraph and Telephone East Corporation
- Jul 2009: Head of the Planning Group of the Corporate Strategy Planning Department of Nippon Telegraph and Telephone East Corporation
- Jul 2011 Head of the Public Relations of the Corporate Strategy Planning of the Company
- .lun. 2015: Senior Vice President,
- Managing Director of Corporate Marketing Strategy Department of NTT DOCOMO, INC. Jun 2016 Senior Vice President
- Head of the Corporate Strategy Planning of the Company Member of the Board of the Company
- Member of the Board of Nippon Telegraph and
- elephone East Corporation (present post Jun 2018: Senior Vice President
- Head of General Affairs Member of the Board of the Company (present post)
- Principal Concurrent Position

Member of the Board of Nippon Telegraph and Telephone East Corporation

Background and Experience Apr. 1988: Joined the Company

- Oct. 2003: Senior Manager of the Corporate Strategy Planning Department of Nippon Telegraph and Telephone East Corporation
- Jun 2011: Head of the Marketing Strategy Group of the Corporate Strategy Planning Department of Nippon Telegraph and Telephone East Corporation
- Jul. 2015: Vice President of Corporate Strategy Planning of the Company Jun 2018: Member of the Board of Ninnon Telegraph and
- hone West Corporation (present post) Senior Vice President Head of the Corporate Strategy Planning of the
 - Company Member of the Board of the Company (present post)
- Principal Concurrent Positions
- Member of the Board of Nippon Telegraph and Telephone West Corporation



Sadayuki Sakakibara Date of Birth: March 22, 1943 Outside Independent Member of the Board Years Served as Member of the Board:

Shares Owned: 8.800 Number of Meetings Attended (Percent) 10/12 (83%)

Background and Experience

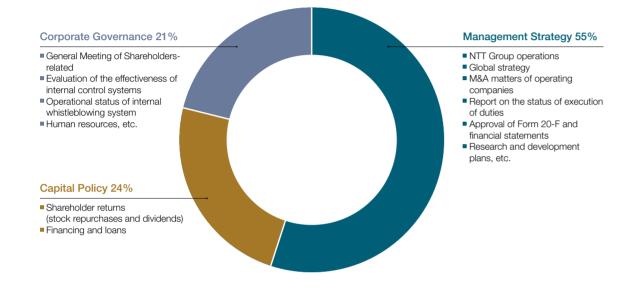
- Apr. 1967: Joined Toyo Rayon Co., Ltd. (currently registered as Toray Industries, Inc.)
- Jun. 1994: Director of the Corporate Planning Department of Toray Industries, Inc. Jun. 1996: Director of the Board of Toray Industries. Inc.
- Jun. 1998: Managing Director of Toray Industries, Inc. Jun, 1999: Senior Managing Director of Toray Industries, Inc.
- Jun. 2001: Executive Vice President of Toray Industries, Inc.
- Jun. 2002: President of Toray Industries, Inc
- Jun. 2010: Chairman and Representative Member of the Board of Toray Industries, Inc.
- Jun. 2010: Director of the Board of Mitsui O.S.K. Lines, Ltd.
- Jun. 2012: Member of the Board of the Company (present post)
- Jun. 2013: Director of Hitachi Ltd.
- Jun. 2014: Chairman of the Japan Business Federation (Keidanren) Jun. 2014: Chairman of the Board of Directors. Toray Industries. Inc.
- Jun. 2015: Chief Senior Adviser and Chief Senior Counselor of Toray Industries. Inc.
- Jun. 2017: Senior Adviser of Toray Industries, Inc.
- Jun. 2018: Special Adviser of Toray Industries, Inc. (present post)

Principal Concurrent Positions Special Adviser of Toray Industries, Inc

Activities and Evaluation of the Effectiveness of the Board of Directors

The Board of Directors of NTT decides on important items related to the Group's management that have passed the review of the Executive Officers Meeting, made up of the president, senior executive vice presidents, full-time directors, and the heads of staff organizations, as well as the reviews of the various committees chaired by the president or a senior executive vice president and attended by the relevant directors, while also monitoring the status of the execution of the duties of individual Members of the Board. In the fiscal year ended March 31, 2018, brisk discussions were held on topics including businesses combinations for expanding profits in the near term for global cloud services and initiatives based on the medium-term management strategy. As part of efforts to monitor business execution, the contents of reports on important initiatives and conditions in business areas were revised to facilitate better understanding and thereby enhance the effectiveness of the Board of Directors.

Breakdown of Agenda Items Presented to the Board of Directors (April 2017-March 2018)



Furthermore, NTT took steps to foster a deeper understanding regarding its business activities among outside independent Members of the Board. For example, meetings were arranged with the management of principal subsidiaries to provide forums for discussions about the strategies of these companies. We also held site tours to help these Members of the Board understand the status of initiatives in our focus R&D areas and security operations. Additionally, ideas and opinions on issues concerning Group management were exchanged among outside independent Members of the Board and Audit & Supervisory Board Members, among outside independent Members of the Board and executives of major Group companies in and outside Japan, and among outside independent Members of the Board of NTT and outside independent Members of the Board of major Group companies and other members.

In these meetings, we received opinions on NTT's Board of Directors from outside independent Members of the Board and Audit & Supervisory Board Members stating that adequate information is provided and that Members of the Board engage in active discussions, thereby ensuring the Board's effectiveness.

Nomination Policies and Procedure for Members of the Board

NTT Group strives to contribute to the resolution of social issues and the realization of a safer, more secure, and more affluent society. To accomplish this goal, the Group acts as a trusted "Your Value Partner" that customers continue to select in order to provide them with new value on a global basis. NTT has established the policy of positioning human resources who share these ideals in the upper ranks of NTT Group's management, and NTT is electing these human resources from both inside and outside the Group.

In regard to Member of the Board candidates, individuals are elected based on their having the broad-ranging perspective and experience, superior management skills and leadership, strong business intuition, and motivation necessary to contribute to the overall development of NTT Group in order to facilitate the increasing of NTT Group's corporate value.

From the perspective of strengthening the function of supervising business execution, for outside independent Members of the Board, NTT elects individuals who present no risk of a conflict of interest with general shareholders. In principle, NTT appoints several outside independent Members of the Board.

The nomination procedure for Member of the Board candidates involves the review of candidates by the Appointment and Compensation Committee. The candidates are then approved by the Board of Directors and presented for voting at the General Meeting of Shareholders.

Messages from Outside Independent Members of the Board



Based on my experience as an educator and a researcher, I have primarily made suggestions from a technological standpoint or from the perspective of strengthening the business execution supervisory function.

IoT, AI, and other technologies that relate directly to NTT's business are advancing at a startling pace. Against this backdrop, I see business opportunities for NTT in global expansion grounded on a platform of undisputed R&D capabilities. Important areas of consideration in this undertaking will include the reinforcement of R&D systems in the United States and the construction of global systems that allow for swift action. In addition, NTT will need to actively participate in the development of international standards for automated driving and other technologies and in supporting customers in heightening security against cyberattacks, a rapidly growing threat. Furthermore, the Company will have to address various technical issues leading up to the migration from public switched telephone networks to IP networks for fixed-line communications services scheduled for 2024.

Compliance is fundamental to business execution. Ensuring compliance requires steadfast effort, such as by having outside Members of the Board objectively monitor reports on the status of business execution from Members of the Board and performing in-depth checks on the status of responses to reports received through the Groupwide Corporate Ethics Help Line.

Discussions at meetings of the Board of Directors are highly active, as members including myself offer advice on matters such as those I just mentioned, and I feel that this advice is accurately reflected in Group management.

Looking ahead, to improve its corporate value, it will be crucial for NTT Group to leverage the strength of its world-leading R&D capabilities in order to lead the industry in creating the IT that will be required by the society of the future. At the same time, NTT Group will need to efficiently cultivate and recruit management and other personnel, through means such as dividing up responsibilities within the Group, to accelerate its global development. Sadayuki Sakakibara

Outside Independent Member of the Board

I am currently in my sixth year as an outside independent Member of the Board. In my time in this position, I have witnessed the ICT industry change at breakneck speed. This pace is not seen in any other industry, and I suspect that it will only grow faster as we move forward.

Over the years, I have been active in my efforts to help strengthen NTT's corporate governance, and my focus in doing so has always been supporting the Company to respond swiftly to such changes in the ICT industry and to create services that meet the needs of customers around the world. For example, I have sat down to speak with the senior management of overseas subsidiaries in meetings about the Group's medium- to long-term global strategies and exchanged opinions with Audit & Supervisory Board Members regarding corporate governance, diversity, and other environmental, social, and governance (ESG) topics.

These activities have enabled me to better understand the workings of the Company. Leveraging this knowledge and the experience I have accumulated to date, I point out issues seen from my outside perspective and spark rigorous debate at meetings of the Board of Directors. Specific topics I have brought up include measures for retaining the principal managers of acquired companies, global procurement, and measures for preventing wrongdoing and scandals.

Under the new management team led by President Jun Sawada, NTT will need to be even more considerate of diversity as it develops its global operations. I also hope that the Company will continue to improve the transparency of the Board of Directors and to strengthen corporate governance as it practices management geared toward accomplishing the United Nations Sustainable Development Goals.

Audit & Supervisory Board

Audit & Supervisory Board Members (As of June 30, 2018)



Audit & Supervisory Board Membe Akiko Ide

Outside Independent Audit 8 Supervisory Board Member

Michiko Tomonaga

Composition of the Audit & Supervisory Board

The Audit & Supervisory Board comprises three outside independent Audit & Supervisory Board Members (one of whom is female), who have experience and knowledge in a range of fields-as a certified public accountant, university professor, and lawyer-and two full-time Audit & Supervisory Board Members (one of whom is female). We conduct effective audits by combining the independence of outside Audit & Supervisory Board Members with the superior information collection

Activities of the Audit & Supervisory Board

Audit & Supervisory Board Members attend meetings of the Board of Directors and other important meetings. In addition, Audit & Supervisory Board Members meet periodically with Representative Members of the Board and Members of the Board to exchange ideas and opinions and hold discussions on various topics. In this way, Audit & Supervisory Board Members maintain an understanding of the execution of duties by Members of the Board and provide their opinions as needed.

In the fiscal year ended March 31, 2018, the Audit & Supervisory Board met 22 times. Moreover, separate from meetings of the Audit & Supervisory Board, the Audit & Supervisory Board Members Preliminary Deliberation Meeting convened 36 times. These meetings provide a venue for the sharing of information. For example, at these meetings Audit & Supervisory Board Members receive explanations from corporate officers on matters to be discussed at the Executive Officers Meeting. In addition, Audit & Supervisory Board Members work closely with Independent Auditors and the Internal Control Office. Audit & Supervisory Board Members exchanged opinions with the Independent Auditor 11 times and with the Internal Control Office 10 times. Audit & Supervisory Board Members also receive explanations concerning audit plans and reports on the status of internal control systems and provide advice as needed.

capabilities of full-time Audit & Supervisory Board Members. Among the board members, full-time Audit & Supervisory Board Member Takao Maezawa has experience in the accounting division of NTT and its affiliated companies, while outside independent Audit & Supervisory Board Member Michiko Tomonaga, a certified public accountant, has considerable knowledge in the areas of finance and accounting.

In initiatives related to Group companies, Audit & Supervisory Board Members received information from the Representative Members of the Board on 21 major Group companies regarding the status of corporate governance and measures to maintain and enhance corporate governance, and discussions were conducted on those matters. In addition, Audit & Supervisory Board Members visited major bases in Japan and overseas (19 bases), received information from local representatives. and conducted discussions. Furthermore, Audit & Supervisory Board Members received reports regarding audit results, etc., from Audit & Supervisory Board Members of major Group companies and exchanged opinions with them. In addition, the Audit & Supervisory Board is implementing initiatives that contribute to enhancing the auditing activities of Audit & Supervisory Board Members of major Group companies, including regularly holding training sessions by outside experts for Audit & Supervisory Board Members of major Group companies.

Through these activities, Audit & Supervisory Board Members support the sound, steady growth of NTT and Group companies from an independent perspective that differs from that of individuals responsible for business execution. In addition, Audit & Supervisory Board Members contribute to the strengthening of corporate governance systems and the fostering of awareness of compliance matters.

Background and Experience of Audit & Supervisory Board Members



Akiko Ide

Date of Birth: February 28, 1955 Audit & Supervisory Board Member Years Served as Audit & Supervisory

Board Member

21/22 (95%)

Shares Owned: 9.000 Number of Board of Director's Meeting Attended (Percent): 12/12 (100%)





Michiko Tomonaga

Outside Independent Audit & Supervisory

Date of Birth: July 26, 1947

Roard Member

Mar. 1975: Registered as a certified public accountant (certification up-to-date) Jul. 2007: Vice President of the Japanese Institute of Certified Public Accountants

Jul. 2008: Senior Partner at Ernst & Young ShinNihon Jun. 2010: Outside Corporate Auditor of Keikyu Corporatio Jun. 2011: Outside Audit & Supervisory Board Member of NTT

Background and Experience Apr. 1977: Joined Nippon Telegraph and Telephone Public

Jun. 2003: General Manager of Customer Services of NTT

Jun. 2005: General Manager of Customer Services of NTT

regional office of NTT DOCOMO_INC

Citizenship Department of NTT DOCOMO, INC.

Apr. 2006: General Manager of Corporate Citizenship

Corporation

DOCOMO, INC

DOCOMO, INC.

of NTT DOCOMO, INC.

Co., Ltd.

(present post)

Background and Experience

Feb. 2012: Audit & Supervisory Board Member of the Cornoration for Revitalizing Earthquake affected Business Jun. 2014: Outside Director of Japan Exchange Group, Inc.

Jun. 2016: Outside Director of Keikyu Corporation (present post) * Audit & Supervisory Board Member Michiko Tomonaga is a Certified Public Accountant who has extensive know concerning finance and accounting matters.

Principal Concurrent Positions Certified Public Accountant Outside Director of Keikvu Corporatio

Background and Experience

& Matsumoto)

Associations

Years Served as Audit & Supervisory Roard Member Shares Owned: 2.700 Number of Board of Director's Meetings Attended (Percent) 11/12 (92%)

Number of Audit & Supervisory Board 21/22 (95%)



Apr. 1974: Registered as attorney-at-law (Daini Tokyo Bar Association) (registration up-to-date) Joined Mori Sogo Law Offices (currently Mori Hamada Apr. 1991: Deputy Chairman of the Daini Tokyo Bar Association Apr. 1997: Executive Governor of the Japan Federation of Bar Apr. 2006: Chairman of the Daini Tokyo Bar Association

Apr. 2006: Vice President of the Japan Federation of Bar Associations Jan. 2012: Established Kowa Law Office (present post) Jun. 2012: Corporate Auditor (Part-Time) for Shimadzu

Takashi lida Date of Birth: September 5, 1946 Outside Independent Audit & Supervisory Board Member

Roard Membe

2.900

Years Served as Audit & Supervisory

Jun. 2014: Outside Audit & Supervisory Board Member of NTT

Shares Owned: Number of Board of Director's Meetings Attended (Percent):

12/12 (100%) Number of Audit & Supervisory Board Meetings Attended (Percent): 22/22 (100%)

(present post) Principal Concurrent Positions Lawver Corporate Auditor (Part-Time) of Shimadzu Corporation Outside Director of Alps Electric Co., Ltd

Corporation (present post)

Jun. 2013: Corporate Auditor of JAFCO Co., Ltd.

Jun. 2013: Outside Director of Alps Electric Co., Ltd. (present

Sen 2004: Concurrently General Manager of Customer Services and General Manager of Information Security of NTT DOCOMO, INC.

Jun. 2006: Executive Director and General Manager of Corporate Jul. 2008: Executive Director and General Manager for Chugoku Jun. 2012: Executive Director and Director of Information Security May 2013: President and Chief Executive Officer of Radishbo-ya Jun. 2013: Executive Director and Senior Manager in Charge of Commerce Business Promotion of NTT DOCOMO,

Jun. 2014: Full Time Audit & Supervisory Board Member of NTT



Date of Birth: October 24, 1955 Audit & Supervisory Board Member

Years Served as Audit & Supervisory Board Member

Shares Owned 9.504

Number of Board of Director's Meetings Attended (Percent): 12/12 (100%) Number of Audit & Supervisory Board Meetings Attended (Percent) 22/22 (100%)



Seiichi Ochiai

Date of Birth: April 10, 1944 Outside Independent Audit & Supervisory Board Member

Years Served as Audit & Supervisory Roard Membe

Shares Owned: 5.304 Number of Board of Director's Meetings Attended (Percent 10/12 (83%)

Number of Audit & Supervisory Board 19/22 (86%)

Management Department, General Manager of Training Institute Executive Manager of the General Affairs of NTT munications Corporatic Jun. 2008: Senior Vice President Deputy General Manager of the Enterprise Business Member of the Board of NTT Communications Corporation Jun. 2011: Executive Vice President Deputy General Manager of the Enterprise Business Division Member of the Board of NTT Communications Aug. 2011: Executive Vice President Head of Second Sales Division Member of the Board of NTT Communications Corporation Jun. 2012: President and CEO of NTT PC Communications

Background and Experience

Corporation Jun. 2006: Executive Manager of Human Resources

Apr. 1978: Joined Nippon Telegraph and Telephone Public

- Jun. 2016: Full-Time Audit & Supervisory Board Member of NTT (present post) * Mr. Maezawa has extensive knowledge concerning finance and
- accounting matters resulting from experience in accounting departments at the Company and related companies.

Principal Concurrent Positions

Background and Experience

- Apr. 1974: Instructor in the Faculty of Law of the University of
- Apr. 1977: Associate Professor in the Faculty of Law of Seikei University
- Apr. 1981: Professor in the Faculty of Law of Seikei University Apr. 1990: Professor at the University of Tokyo Graduate Schools for Law and Politics and the Faculty of Law of the University of Tokyo
- Apr. 2007: Professor at Chuo Law School
- Apr. 2007: Registered as attorney-at-law (Dai-Ichi Tokyo Bar Association) (registration up-to-date) Jun. 2007: Emeritus Professor at the University of Tokyo (present
- Jun. 2008: Outside Director of EBARA CORPORATION
- Jun. 2012: Outside Audit & Supervisory Board Member of NTT (present post)
- Jul. 2012: Outside Director of Meiji Yasuda Life Insurance Company (present post)
- Jun. 2013: Outside Auditor of Ube Industries, Ltd. (present post) Principal Concurrent Positions
- Outside Director of Meiji Yasuda Life Insurance Company Outside Auditor of Ube Industries. I to

Notes: 1. As of June 30, 2018

2. Number of meetings attended is for the fiscal year ended March 31, 2018

Nomination Policies and Procedure for Audit & Supervisory Board Members

NTT has the policy of electing Audit & Supervisory Board Member candidates who have the capacity to provide audits based on specialized experience and insight. From the perspective of guaranteeing fair audits of the execution of duties by Members of the Board, for outside independent Audit & Supervisory Board Members, NTT elects people who present no risk of a conflict of interest with general shareholders. In accordance with the Companies Act, NTT ensures that outside independent Audit & Supervisory Board Members make up half or more of the Audit & Supervisory Board.

Support Structures for Audit & Supervisory Board Members

The Office of Audit & Supervisory Board Members, which has four dedicated NTT employees, has been established as a structure to support audits by Audit & Supervisory Board Members. In addition, NTT has concluded contracts with the lawyers and other specialists who may be called upon as necessary to provide advice at the expense of NTT.

In addition, when Audit & Supervisory Board Members are elected, they are trained with respect to market trends and

The procedure for nomination involves Members of the Board proposing Audit & Supervisory Board Member candidates based on the aforementioned nomination policy. These proposals are then discussed by the Audit & Supervisory Board, which consists of half or more of outside independent Audit & Supervisory Board Members, and consent is granted if appropriate. The candidates are then approved by the Board of Directors and presented for voting at the General Meeting of Shareholders.

compliance. They then continue to undergo training on a broad spectrum of topics, including domestic and overseas economic and social issues, after being appointed.

Moreover, NTT is creating opportunities for tours and implementing other initiatives so that outside Audit & Supervisory Board Members can further deepen their understanding of NTT and NTT Group.

Independent Members of the Board and Audit & Supervisory Board Members

Nomination Procedure for Outside Members of the Board and Outside Audit & Supervisory Board Members

From the perspectives of strengthening supervising functions for execution and guaranteeing appropriate audits of the execution of duties by Members of the Board, NTT has the policy of selecting individuals to serve as outside Members of the Board and outside Audit & Supervisory Board Members who do not represent risks of conflicts of interest with general shareholders.

NTT designates outside Members of the Board and outside Audit & Supervisory Board Members who fulfill both the independence criteria stipulated by Tokyo Stock Exchange, Inc., and NTT's own independence standards as outside independent Members of the Board or outside independent Audit & Supervisory Board Members.

	Independence Standards
n order to meet th	e independence criteria, a person may not fall under any of the categories below in the last three fiscal years.
1) A person who e	xecutes business in a partner company that exceeds NTT's Standards *1
2) A person who e	xecutes business in a lending company that exceeds NTT's Standards*2
other gain in ass	accountant, a lawyer, or any other person providing professional services, who received monetary payments or any sets equal to or more than ¥10 million, excluding the Board Members' or Audit & Supervisory Board Members' com- NTT or its major subsidiaries ^{*3} in any of the last three fiscal years
4) A person who e	xecutes business in an organization that received donations exceeding NTT's Standards *4
Even if any of (1	through (4) above applies to a person, where it has been decided that a person meets the Independence
	easons shall be explained and disclosed at the time of the person's appointment as the Independent Member of the & Supervisory Board Member.
	at exceeds NTT's Standards" is defined as a company that has had any business dealing with NTT and its major subsidiaries ⁺³ in any of the last three fiscal than 2% of the total operating revenues of NTT and its major subsidiaries for the respective fiscal year.
	at exceeds NTT's Standards" is defined as a company in which the total amount of borrowings on a consolidated basis in any of the last three fiscal years an 2% of NTT's consolidated total assets for the respective fiscal year.
	are NIPPON TELEGRAPH AND TELEPHONE EAST CORPORATION, NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION, NTT ORPORATION, NTT DATA CORPORATION, and NTT DOCOMO, INC.
4 An "organization that r	eceived donations exceeding NTT's Standards" is defined as an organization which received donations from NTT and its major subsidiaries ⁴³ in any of the eceding ¥10 million or 2% of the total income of the organization, whichever is larger, during the respective fiscal year.

Reason for Nomination and Status of Independence

Outside Members of the Board (Independent Members of the Board)

NICTOR	Deepen for a seriestica	Status of independence Total amount of transactions with and total amount of donations from NTT and its major subsidiaries in the last three fiscal years				
Name	Reason for nomination					
Katsuhiko Shirai	Katsuhiko Shirai has a wealth of experience as an operational director of an educational institution and a high level of		Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	
		Waseda University, at which Katsuhiko Shirai has served as President		Comparison with total annual revenues of the university	Less than ⁻	
	integrity and insight. NTT believes that he will help strengthen the supervisory function for business execution		Total of donations	Comparison with total annual revenues of the university	Less than	
	and expects to incorporate the opinions he provides from his wide-ranging experience and his managerial perspective.	The Open University of Japan Foundation, at which Katsuhiko Shirai	Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than ⁻	
		served as Chairperson (retired in March 2017)	Total of donations	_	Less than ¥10 million	
	Sadayuki Sakakibara has a wealth of experience, including as an operational director of an educational institution, and a high level of integrity and insight. NTT believes that he will help strengthen the super- visory function for business execution and expects to incorporate the opinions he provides from his wide-ranging experience and his managerial perspective.	Toray Industries, Inc., at which Sadayuki Sakakibara served as Chairman of the Board Japan Business Federation (Keidanren), at which Sadayuki Sakakibara served as Chairman (retired in May 2018)	Total of	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than	
Sadayuki			transactions	Comparison with total annual revenues of the company	Less than	
Sakakibara			Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than	
			Total of donations	_	Less than ¥10 million	
I Outside	Audit & Supervisory Bo	pard Members (Independent				
Outside	Audit & Supervisory Bo		Status of	independence		
	· · ·	Total amount of transactions with and Ernst & Young Japan, at which Michiko	Status of total amount of donati		e fiscal years Less than	
	Reason for nomination Michiko Tomonaga has worked for many years as a Certified Public Accountant, and NTT	Total amount of transactions with and	Status of	independence ons from NTT and its major subsidiaries in the last three Comparison with total annual operating revenues of NTT and its major		
Name	Reason for nomination Michiko Tomonaga has worked for many years as a Certified	Total amount of transactions with and Ernst & Young Japan, at which Michiko Tomonaga worked as Senior Partner	Status of total amount of donati Total of	independence ons from NTT and its major subsidiaries in the last three Comparison with total annual operating revenues of NTT and its major subsidiaries Comparison with total annual revenues	Less than	

Name	Deccon for pomination	Status of independence				
Name	Reason for nomination	Total amount of transactions with and	total amount of donati	ions from NTT and its major subsidiaries in the last thre	e fiscal years	
Michiko	Michiko Tomonaga has worked for many years as a Certified Public Accountant, and NTT expects that she will conduct future audits based on the knowledge and insight that she has gained through her career.	Ernst & Young Japan, at which Michiko Tomonaga worked as Senior Partner (retired in June 2010)	Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	
				Comparison with total annual revenues of the audit firm	Less than 1	
Tomonaga		Japanese Institute of Certified Public Accountants, at which Michiko Tomonaga served as Vice President (retired in July 2010)	Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	
				Comparison with total annual revenues of the association	Less than 1	
	Seiichi Ochiai has been serving for many years as a university professor specializing in the study of law, and NTT expects that he will conduct future audits based on the knowledge and insight that he has gained through his career.	Chuo University, at which Seiichi Ochlai was a professor (retired in March 2015)	Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	
Seiichi Ochiai				Comparison with total annual revenues of the university	Less than 1	
			Total of donations*1	_	Less than ¥10 million	
Takashi Iida	Takashi lida has worked for many years in legal sectors, and NTT expects that he will conduct future audits based on the knowledge and insight that he has gained through his career.	Mori, Hamada & Matsumoto Law Office, with which Takashi lida was affiliated (retired in December 2011)	Total of transactions	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	
		Kowa Law Office, which Takashi lida established	Total of transactions*2	Comparison with total annual operating revenues of NTT and its major subsidiaries	Less than 1	

*1 Applicable donations only include those to organizations other than the law schools that Seiichi Ochiai served at. *2 Applicable transactions only include those related to common communication services.

Status of Activities of Outside Members of the Board and Outside Audit & Supervisory Board Members

	Name	Statements Made at Board of Directors' Meetings and Audit & Supervisory Board Meetings
Outside Members of the Board (Independent Members of the Board)	Katsuhiko Shirai	Katsuhiko Shirai made comments mainly concerning the circumstances of Group management and global strategy from his perspective as an operational director of an educational institution with extensive experience.
	Sadayuki Sakakibara	Sadayuki Sakakibara made comments mainly concerning the circumstances of Group management and capital policies from his perspective as a corporate executive with extensive experience.
Outside Audit & Supervisory Board Members (Independent Audit & Supervisory Board Members)	Michiko Tomonaga	Michiko Tomonaga made comments mainly concerning the accounting audit based on the professional perspective fostered through her extensive experience as a certified public accountant.
	Seiichi Ochiai	Seiichi Ochiai made comments mainly concerning corporate governance based on the professional perspective fostered through his extensive experience as a university professor and a lawyer.
	Takashi lida	Takashi lida made comments mainly concerning corporate governance based on the professional perspective fostered through his extensive experience as a lawyer.

Compensation of Members of the Board and Audit & Supervisory Board Members

For the purpose of improving objectivity and transparency in the compensation of Members of the Board, NTT has established the Appointment and Compensation Committee, which consists of four Members of the Board, including two outside independent Members of the Board. After discussion at this committee, compensation-related decisions are made by the Board of Directors.

Compensation of Members of the Board (excluding outside Members of the Board) consists of a base salary and a bonus. The base salary is paid monthly on the basis of the scope of each Member of the Board's roles and responsibilities. The bonus is paid taking into account NTT's business results for the respective fiscal year. Also, Members of the Board make

monthly contributions of a defined amount or more from their base salary and bonus toward the purchase of NTT shares through the Board Members Shareholding Association, in order to reflect NTT's medium- and long-term business results in compensation. Purchased shares are to be held by Members of the Board throughout their terms of office.

In order to maintain a high level of independence, compensation of outside Members of the Board consists of a base salary only, and is not linked to NTT's business results.

For the same reason, compensation of Audit & Supervisory Board Members consists of a base salary only. The amount of this salary is determined by resolution of the Audit & Supervisory Board.

Total Compensation of Members of the Board and Audit & Supervisory Board Members (Fiscal Year Ended March 31, 2018)

Position	Number of payees	Total compensation
Members of the Board	12	¥549 million
Audit & Supervisory Board Members	5	¥119 million
Total	17	¥668 million

Notes: 1. At the 21st Ordinary General Meeting of Shareholders held on June 28, 2006, the maximum limit on total annual compensation of Members of the Board was set at an aggregate of ¥750 million and the maximum limit on total annual compensation of Audit & Supervisory Board Members was set at an aggregate of ¥200 million.

2. Total compensation of Members of the Board includes ¥101 million in bonuses for the fiscal year ended March 31, 2018.

3. In addition to the above, an aggregate of ¥14 million is to be paid to Members of the Board who are also employees as bonuses for their service as employees

Independent Auditor

Activities of the Independent Auditor

NTT has appointed KPMG AZSA LLC as its Independent Auditor. The Independent Auditor maintains the level of coordination with the Audit & Supervisory Board and the Internal Control Office necessary to conduct appropriate audits. As part of this coordination, the Independent Auditor appropriately audits by reporting the audit plans and audit results to the Audit & Supervisory Board and working together with the Internal Control Office to establish systems for monitoring the status of oversight related

to evaluating internal control systems for financial reports. For the fiscal year ended March 31, 2018, the Independent Auditors who carried out the audit were Takuji Kanai, Kensuke Sodekawa, and Masashi Oki, whose years of experience as Independent Auditors are within the statutory guidelines.

In addition, 30 certified public accountants and 23 other staff members assisted in conducting the audits.

Nomination of the Independent Auditor

NTT believes that it is important to maintain and enhance audit not reappoint the Independent Auditor in any of the cases guality while increasing audit efficiency. Based on this policy, described in Article 340 (1) of the Companies Act based on the Audit & Supervisory Board evaluates Independent Auditor a unanimous vote by all Audit & Supervisory Board Members. candidates from the perspectives of their independence and In addition, if the Board of Directors determines that it would specialties and the appropriateness and adequateness of their be difficult for the Independent Auditor to perform proper auditing activities. The candidates who are approved by the audits, the Audit & Supervisory Board may propose a resolu-Audit & Supervisory Board are then presented for voting at the tion to the Ordinary General Meeting of Shareholders that the Ordinary General Meeting of Shareholders. Independent Auditor be discharged or that the Independent The Audit & Supervisory Board may choose to dismiss or Auditor not be reappointed.

Compensation of Independent Auditor

NTT and its major subsidiaries pay compensation to KPMG AZSA LLC, NTT's Independent Auditor, and other member firms

	Fiscal year ended March 31, 2017	Fiscal year ended March 31, 2018
Compensation for audit services	¥5,004 million	¥6,036 million
Compensation for non-audit services	¥567 million	¥398 million
Total	¥5,571 million	¥6,434 million

Note: Audit services refer to the auditing of the financial statements of NTT and its consolidated subsidiaries in Japan and overseas Non-audit services include the provision of guidance and advice related to International Financial Reporting Standards, tax returns, and tax consultation for consolidated subsidiaries in Japan and overseas

Internal Control

Overview of Internal Control Systems

NTT has established the Basic Policies Concerning the Maintenance of Internal Control Systems for NTT Group, which was approved via resolution by the Board of Directors.

Based on these policies, NTT Group has established the Internal Control Office, which oversees the establishment of internal control rules and frameworks. In addition, NTT Group evaluates the effectiveness of the internal control systems based on audit reviews and uniform audits regarding high-risk matters affecting the entire Group. Necessary improvements will be implemented accordingly.

Compliance

Overview of Compliance Systems

In regard to compliance systems, NTT has formulated the NTT Group Corporate Ethics Charter to guide all employees in practicing legal compliance and acting based on high ethical standards. We take steps to improve employee understanding of this charter, including conducting employee training programs and posting examples of the charter's implementation on the Company intranet. In addition, we have set up the Corporate

	of the KPMG network for audit services and for non-audit
S	services.

In regard to internal control systems for financial reporting based on the Financial Instruments and Exchange Act, the Company takes appropriate measures to ensure the reliability of its financial reporting. To facilitate these measures, tests and evaluations are performed on the implementation status of pertinent internal control systems.

More information on the Basic Policies Concerning the Maintenance of Internal Control Systems for NTT Group can be found on NTT's corporate website http://www.ntt.co.ip/about e/internalcontrol.html

Ethics Help Line. Available to employees of all Group companies, this help line allows for employees to seek consultation or issue reports regarding wrongful acts or scandals.

For more details, please refer to the Governance section of NTT Group Sustainability Report 2018 http://www.ntt.co.ip/csr e/index.html

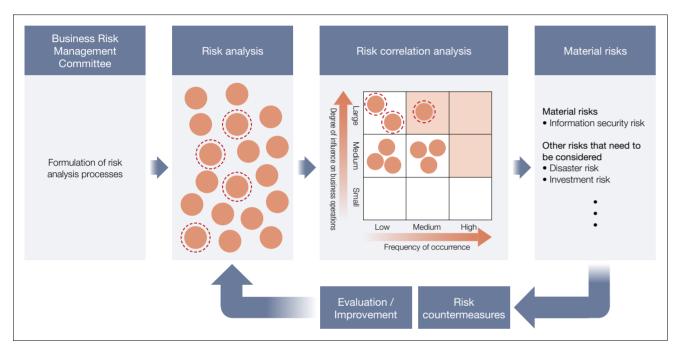




Promotion of Risk Management

With respect to business risk management. NTT has established Risk Management Rules stipulating basic policies on risk management with the aims of, among others, anticipating and preventing the materialization of potential risks and minimizing losses if any risk materializes. Chaired by a senior executive vice president, the Business Risk Management Committee spearheads efforts to develop and operate a PDCA cycle for managing risks. During the fiscal year under review, the committee held one meeting during which discussions involved identifying risks that could potentially have a Companywide impact, policies for managing such risks, and other such matters.

NTT has also formulated the NTT Group Business Risk Management Manual, and distributed it to each Group company, in order to facilitate Groupwide risk management initiatives. On the basis of the manual, which stipulates matters that include proactive measures for potential risks, collaborative Groupwide approaches and policies for addressing risks that materialize, and pathways for communicating information, systems have been developed and implemented that enable swift action to be taken.



Identification of Risks / Specified Material Risks

From time to time, NTT reviews assumed risks and management policies based on changes in the social environment.

In the identification of risks, the Business Risk Management Committee plays the central role. Analysis processes for the risks faced by NTT Group are formulated, and risk analysis is periodically implemented in accordance with these processes. In this way, Companywide risks are identified. In addition, correlation analyses are implemented for these risks. Those risks with the potential to have the greatest influence are specified as "material risks," and countermeasures are formulated.

Information Security Risk

If there is a leak or other misuse of confidential information, such as personal information, the action may affect NTT Group's business, including its credibility and reputation.

To prevent such a situation. NTT Group practices rigorous management of the customer information and other confidential information obtained in the course of its business. In addition, NTT Group has formulated the NTT Group Information Security

Disaster Risk

Five Group companies-NTT, NTT East, NTT West, NTT Communications, and NTT DOCOMO-have been designated as public institutions under the Disaster Countermeasures Basic Act. Accordingly, in preparation for a disaster, NTT Group has formulated the Disaster Management Operation Plan for the purpose of smooth, appropriate implementation of measures to prevent damage.

For more information on the risk factors, please refer to NTT's corporate website. http://www.ntt.co.ip/ir/mgt e/risks factors.html



Strategic Shareholdings

NTT does not hold so-called "cross-shareholdings" to create stable shareholders, and has no plans to hold them in the future.

On the other hand, as one of its business policies, the Company pursues collaboration and open innovation with partners in various industries to contribute to medium- to long-term improvement in corporate value. Based on this policy, NTT holds and sells shares based on its determination of whether doing so would contribute to the improvement of medium- to long-term corporate value.

Policy; maintains information management systems; institutes stringent security measures for preventing unauthorized access, loss, alteration, and leakage of information; conducts once annual training and other awareness-raising programs for officers and employees; performs appropriate supervision of contractors; and publishes related manuals.

Damage prevention measures require an ongoing process of periodic review to reflect the latest knowledge and legal revisions. In June 2014, the Japanese government revised the Nankai Trough Earthquake Countermeasures Basic Plan. In response, NTT Group has revised and enhanced the Disaster Management Operation Plan.



With respect to exercising voting rights of strategic shareholdings, NTT exercises voting rights acquired through share ownership, as it sees fit and appropriate and upon determining whether it is an initiative that would contribute to the improvement of medium- to long-term corporate value, from the perspective of sustainable growth of the companies NTT invests in and improving corporate value for both NTT and the companies.

Dialogue with Shareholders and Other Investors

NTT promotes management that prioritizes discussions with shareholders, which not only includes discussions at General Meetings of Shareholders but also involves senior management, including the president, actively promoting discussions with shareholders about medium-term management strategies, corporate governance, business performance trends, and other topics through one-on-one meetings with institutional investors and briefings targeting individual investors.

The opinions received from shareholders through such discussions are shared in the Company. NTT considered and formulated the "Towards the Next Stage 2.0" Medium-Term Management Strategy that was announced in May 2015 in light of shareholder opinions.

During discussions with shareholders, insider information is strictly controlled, and information is proactively disclosed with due consideration to fair disclosure (timely, fair, and impartial information disclosure). To increase convenience for overseas investors, we strive to release Japanese- and English-language disclosure materials at the same time. The Japanese- and English-language versions of the entire Notice of Convocation for the Ordinary General Meeting of Shareholders, including the business report, were released at the same time, more than one month prior to the date of the Ordinary General Meeting of Shareholders.

Policy for Constructive Dialogue with Shareholders and Other Investors

Appointment of executives / Members of the Board

Measures to ensure positive cooperation between internal departments

Promotion of opportunities for dialogue

Appropriate and effective feedback

Control of insider information

Initiatives to Enhance Dialogue

For institutional investors

- Implementing quarterly financial results presentations (4 times)
- Participating in IR conferences in Japan and overseas (10 times)
- Holding NTT IR DAY (briefing for institutional investors, 1 time) Implementing one-on-one briefings in Japan and overseas
- (total of more than 350 times)

(Topics: medium-term management strategy, financial results, corporate governance, etc.)

Receipt of Awards for IR Activities

Awards for Excellence in Corporate Disclosure (The Securities Analysts Association of Japan)



2017 Award for Excellence in Corporate Disclosure - Industries -

The Head of Finance and Accounting is responsible for communications with investors, and the IR office is established within the Finance and Accounting Department

The Finance Strategy Committee takes steps to enhance communications based on cooperation with related departments, such as periodically discussing the settlement of accounts.

In addition to one-on-one meetings, we hold briefings, etc., in accordance with themes that reflect investor needs

Input from shareholders and other investors is shared with management and Group companies and is used to enhance communications.

We are implementing information disclosure in a fair and impartial manner in accordance with our disclosure policy.

For individual investors

- Implementing Company briefings (19 times) (including 4 company briefings by senior executives)
- Implementing online Company briefings (1 time)
- Participating in individual investor fairs (1 time)
- Holding facility tours (1 time)
- Note: The numbers of times are for the fiscal year ended March 31, 2018

Internet IR Excellence Awards (Daiwa Investor Relations)

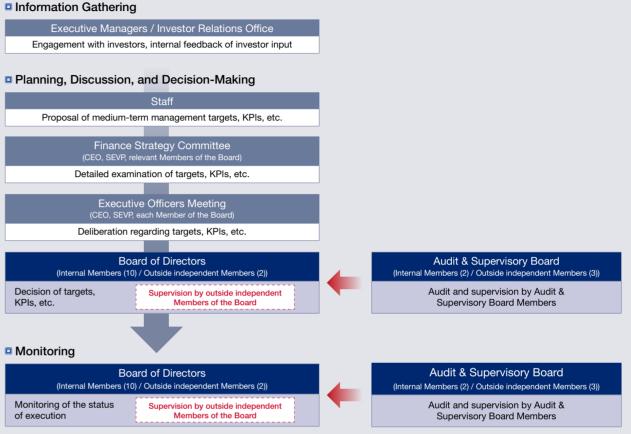


Management Emphasizing Dialogue with Shareholders

Information Gathering

Executive Managers / Investor Relations Office

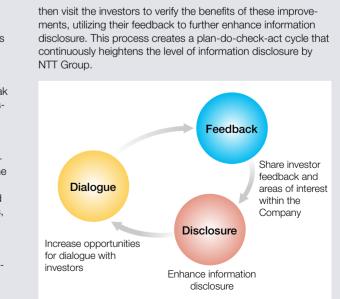
Planning, Discussion, and Decision-Making



Enhancement of Shareholder Relations Activities and Communication of Feedback within the Company

NTT is actively enhancing its shareholder relations activities. Specific initiatives in this regard include increasing the number of visits to the individuals entrusted with exercising voting rights on behalf of domestic and overseas institutional investors and holding additional meetings with institutional investors for discussing environmental, social, and governance (ESG) issues. We also seek to provide a wider range of opportunities to speak with investors on the topic of corporate governance. The investor feedback received and areas of interest identified through these shareholder relations activities are communicated to the Disclosure Committee, which is chaired by a senior executive vice president (the CFO), so that disclosure policies and strategies can be formulated based on this information. Based on the resulting disclosure policies and strategies, a wider range of information pertinent to the exercise of voting rights is included in notices of convocation (business reports), integrated reports, and other documents. For example, we seek to disclose more viable information in relation to corporate governance (revised the items included to incorporate those for which investor interest is high) and reworked the overall content of such documents to focus more on items related to increasing corporate value, such as Initiatives for Cybersecurity and Initiatives to Ensure Diverse Personnel Can Demonstrate Their Talents. We

Example: Formulation and Execution of the "Towards the Next Stage 2.0" Medium-Term Management Strategy

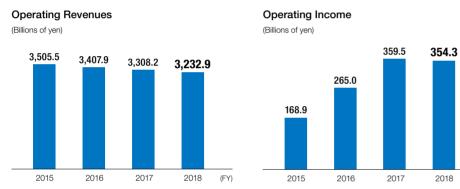


Regional Communications Business

In the Regional Communications Business, NTT Group worked to develop its B2B2X business through the Hikari Collaboration Model, the wholesale provision of fiber-optic access infrastructure services to various service providers.

Financial Results for the Year Ended March 31, 2018







Details of Major Initiatives

Expanding Collaboration with Service Providers in Other Industries under the Hikari Collaboration Model

Operating Income

¥354.3 billion

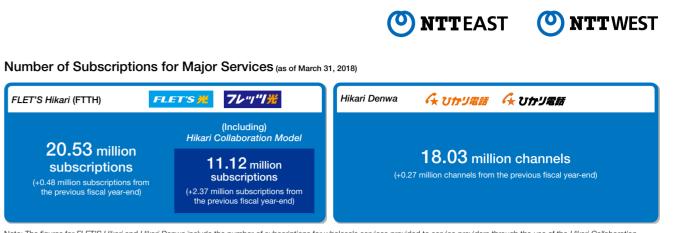
With regard to the Hikari Collaboration Model, the number of service providers providing wholesale services was approximately 700 companies at the end of the fiscal year ended March 31, 2018, as NTT Group continued to expand collaborative projects with not only business operators in the communications industry, energy industry, real estate industry, security industry, and housing industry, but also with business operators in diverse industries including social infrastructure operators and FinTech operators. New use cases were developed among business operators operating social infrastructure businesses, as the Hikari Collaboration Model was adopted to promote the conversion to fiber-optics in networks connected to traffic signals. As a result of these initiatives, the number of fiber-optic access service subscriptions using this model was 11.12 million.

Continuously Reducing Costs and Raising Efficiency in Capital Investment

By increasing productivity and streamlining development costs, among other measures, and through the systematization of work processes, NTT Group continuously worked to reduce costs. Furthermore, by simplifying and streamlining networks and further increasing the use of existing facilities, NTT Group worked to make capital investment more efficient.

Expanding Wi-Fi Service Coverage Areas

3 As companies and local governments are proactively promoting the use of Wi-Fi as a powerful information service tool, in various regions NTT Group continuously worked to improve convenience for the increasing number of visitors to Japan by expanding the coverage areas of Wi-Fi, resulting in the number of Wi-Fi area owners reaching 744.



Note: The figures for FLET'S Hikari and Hikari Denwa include the number of subscriptions for wholesale services provided to service providers through the use of the Hikari Collaboration Model by NTT East and NTT West.

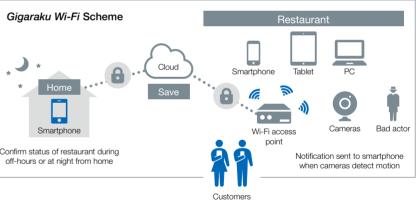
Recent Project

Wi-Fi Services for Customers and Cloud-Based Cameras at Restaurants () NTTEAST

Recently, Wi-Fi services at restaurants for customers have become indispensable to improving customer satisfaction. This trend has advanced to the point that Wi-Fi has become such a matter of consideration that the availability of these services is mentioned on restaurant information sites. NTT East has helped restaurant owners address the need for these services through the introduction of its Gigaraku Wi-Fi service for offices and stores, which enables restaurant owners to provide Wi-Fi services for customers. As an added bonus, these services have proven to be

a draw for tourists from overseas.

Another recent trend is the increasing number of restaurants installing cloudbased surveillance cameras to monitor customer inflow and protect the premises. The Gigaraku Wi-Fi Camera Option Wi-Ficompatible, cloud-based camera service makes it possible for restaurant staff to view footage from cameras in real-time via their smartphone during off-hours or at night. Moreover, cameras can be set to automatically record intrusions by reacting when they detect motion or noises.



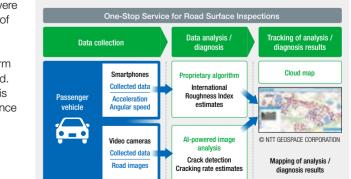
Project for the Future

AI-Powered Road Surface Diagnosis Solution

Efficient, Low-Cost Inspections of Aging Road Surfaces

Many of the roads in Japan used by people in their daily lives were built during the period of high economic growth, and the need of preventive maintenance of these roads is constantly rising. To address this need, NTT FIELDTECHNO CORPORATION has commercialized an ICT solution that makes it possible to perform low-cost inspections and diagnoses over wide stretches of road. Going forward, we will move ahead with the development of this solution to make greater contributions to the efficient maintenance and management of social infrastructure through features that allow for higher efficiency in inspections.



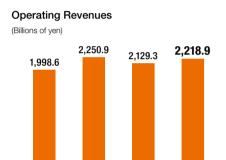


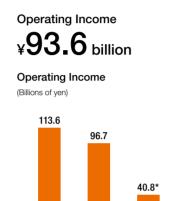
Long Distance and International **Communications Business**

In the Long Distance and International Communications Business, in addition to enhancing its provision of seamless ICT solutions combining network and security and other services, NTT Group worked to enhance its service provision in growth areas such as cloud services and IT outsourcing.

Financial Results for the Year Ended March 31, 2018







93.6

2018



Details of Major Initiatives

2016

2015

Proactively Expanding Cloud Service Platform

2017

2018

(FY)

2015

To respond to demand for cloud services and data centers in various regions worldwide, NTT Group advanced the expansion of its service provision systems in various countries with continuous market expansion. NTT Group launched Texas Dallas 1 (TX1) Data Center and Virginia Ashburn 3 (VA3) Data Center in the United States, Germany Munich 2 Data Center and Germany Rhein-Ruhr 1 Data Center in Germany, and new data center service in South Africa.

2016

2017

* Includes impairment losses accompanying the consolidation of security operations and one-time expenses related to structural reforms at Dimension Data (approximately ¥60.0 billion)

Stepping Up Provision of Services in Growth Fields

To strengthen the competitiveness of its cloud services, NTT Group promoted the consolidation and strengthening of the cloud services business, such as through the transfer of cloud service facilities, development, and operational tasks from Dimension Data to NTT Communications.

Project for the Future

Recent Projects

Expansion of high-quality data

the seventh country in Europe where services are offered

Launch of the Germany Rhein-Ruhr 1 Data Center

Launch of data center service

in South Africa

center services to the Netherlands

11111

Acquisition of Secure-24, Leading Provider of Managed Services in the U.S.

Expansion of supply capacity of

Frankfurt data centers by 1.5x

Intermediate Holdings, Inc., a major U.S.-based leading provider of comprehensive IT-managed services, announced that NTT Communications has completed its 100% acquisition of Secure-24, effective immediately.

customers effectively operate and maintain a wide range of enterprise applications, such as SAP and Oracle. Furthermore, NTT Group will combine its existing cloud, network, and data center services with Secure-24's IT-managed services to respond to increasing global demand from customers looking to manage their hybrid IT environments.

Going forward, NTT Group will continue to strengthen the technical capabilities and global reach of its IT-managed services to help customers optimize their IT environments and digitally transform their businesses.





Reinforcement of Framework for Global Cloud Service Provision



- NTT Communications Corporation, the ICT solutions and international communications business within NTT Group, and Secure-24
- IT-managed services are a key focus of NTT Group's strategies for global growth. The acquisition of Secure-24 will enable NTT Communications, Dimension Data, and other NTT Group companies to strengthen their global capabilities to help enterprise





Mobile Communications Business

In the Mobile Communications Business, NTT Group has worked to promote sales of the billing plan "Kakehodai & Pake-aeru" and of "docomo Hikari," promoting collaboration with various business partners and providing new value-added services to enhance profitability in the smart life area

Operating Income

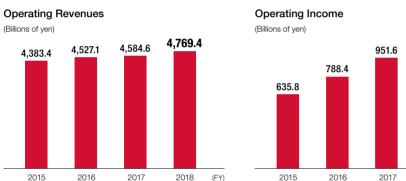
¥982.1 billion

982.1

2018

Financial Results for the Year Ended March 31, 2018







Details of Major Initiatives

Continuously Enhancing Billing Plans

In addition to continuing to promote the sales of Kake-hodai & Pake-aeru, a billing plan tailored to suit a customer's stage of life that offers more affordable rates to long-term users, NTT Group began offering its Simple Plan and docomo with, among other initiatives, working to enhance returns to its customers. As a result, the number of subscriptions to Kake-hodai & Pake-aeru reached 41.96 million.

Promoting Sales of docomo Hikari

By utilizing the Hikari Collaboration Model from the Regional Communications Business, NTT Group promoted the sale of the "docomo Hikari Pack," which bundles fiber-optic access infrastructure services, Internet access services, and mobile services. As a result, the number of subscriptions to docomo Hikari reached 4.76 million.

Strengthening Profitability in the Smart Life Area

With Komatsu Ltd. and other parties, NTT Group agreed to jointly plan and operate "LANDLOG," a new platform connecting the entire construction manufacturing process. In addition to starting field testing of "LANDLOG," NTT Group implemented initiatives utilizing advanced technology, including the launch of "AI Taxi[®]," a taxi ride demand forecasting service utilizing AI, as well as "5G Trial Site," advancing "d+" initiatives to jointly create new added value through collaboration with various business operators.





Recent Project

Launch of my daiz Al Guide Service

On May 30, 2018, NTT DOCOMO launched my daizTM, an Al guide service that provides users with the information and services they need in their daily lives at the appropriate timing from NTT DOCOMO or its partners.

The my daiz service learns from the behavior of each individual customer to allow "members" (the guide services that can be provided through my daiz) of NTT DOCOMO and its partners to deliver information and services to customers' smartphones or tablets that are tailored to the individual needs of each customer.

Moreover, my daiz predicts the needs of customers to enable members to supply information via voice chat, in-app information displays, and pop-ups on smartphone lock screens. It is also possible for my daiz to respond to requests from customers issued through voice commands or touch-screen operation in a conversationlike fashion. For example, my daiz can utilize other NTT DOCOMO services to search for products or contents: make reservations for partner company members, restaurants, and taxis; and respond to shopping-related consultations. The top menu of the my daiz app displays personalized information that a user is expected to need at any given time based on a learned understanding of the user's behavior and tastes.

Project for the Future

NTT DOCOMO Achieves World's First 5G Wireless Data Transmission in Ultrahigh-Mobility Environment Exceeding 300 km/h

NTT DOCOMO announced that, together with NEC Corporation and NTT, it has achieved what is believed to be the world's first successful 28 GHz wireless data transmission between a 5G base station and a 5G mobile station in 5G field trials using a car moving at 305 km/h. This trial utilized a car to simulate the provision of 5G services on high-speed railroads and in other ultrahigh-mobility environments.

Going forward. NTT DOCOMO will continue conducting 5G research with world-leading vendors and partners to expand 5G capabilities in a wide range of operating environments.

döcomo





Ultrahigh-speed test car

Data Communications Business

In the Data Communications Business, NTT Group responded to the acceleration of its customers' expansion in the global market and the diversification and increased sophistication of their needs by working to expand its business in the global market and to expand and reliably provide a range of IT services, such as system integration, that are responsive to changes in the market.

Operating Income

¥127.8 billion

Financial Results for the Year Ended March 31, 2018







Details of Major Initiatives

Expanding Business in the Global Market through M&A Activities

Under NTT DATA Services, launched in April 2017, NTT Group steadily achieved the integration of the former Dell Services Division, of which NTT Group completed the acquisition last year, and pursued the integration of its business centered on North America. In particular, NTT Group promoted initiatives to expand its businesses that utilize the Group's abundant outsourcing results and knowledge in various fields, including healthcare, the public sector, and finance, and to further enhance its local presence.

Utilizing Blockchain Technologies in Initiatives Targeting the Financial Industry

NTT Group pursued initiatives to utilize cutting-edge blockchain technologies, established a consortium as the organizing office to complete a trade information collaborative platform, and promoted activities together with 14 companies representing various industries. Furthermore, NTT Group was selected as a partner vendor in the Japanese Bankers Association's "Collaborative Blockchain Platform," contributing to the promotion of practical testing to develop new services.

Promoting Sales of WinActor® RPA Solution

In terms of RPA solutions for the automation and streamlining of desk work, which is rapidly spreading due to the increasing move toward work style reforms in recent years, NTT Group promoted sales of WinActor[®], a solution developed by NTT Group. In addition to launching the English-language version, by strengthening the functions for financial accounting operations, which have a particularly strong need for automation, and through other initiatives, NTT Group was able to introduce WinActor® to customers in a range of industries, supporting work style reforms.

Recent Project

Highly Convenient, Cutting-Edge Mobile Register® Public Fee Credit Payment Service for the Impending Era of FinTech

The recent advancement of FinTech has led to the proliferation of various payment services through smartphone apps along with a rise in demand for credit card payment services that can be used in such settings as shopping at brick-and-mortar stores or online. Meanwhile, the introduction of credit card payment systems for public fees has faced an obstacle in the form of the large initial installation cost of systems at local government agencies.

To address this situation, NTT DATA introduced a credit card payment function into its Mobile Register® QR code payment service Mobile Register[®] is a service that allows for payments to be made via Internet banking by scanning QR codes printed on bills using

for smartphones to commence the Mobile Register® Public Fee Credit Payment Service for local government agencies in April 2018. a dedicated smartphone app. Initially launched in May 2009, Mobile Register® was Japan's first service for paying public fees via mobile phones, and this QR code payment system has since been introduced by several local governments in Japan. The introduction of credit card payment services will make Mobile Register[®] the only smartphone app in Japan to offer three payment options; payment from a bank account, account-to-account transfer, and payment using a credit card. With its low introduction costs, we anticipate that Mobile Register® will contribute to increased rates of payments for public fees as citizens enjoy the additional convenience of being able to choose from various payment options through their smartphones.

Overview of Mobile Register® Public Fee Credit Payment Service



Project for the Future

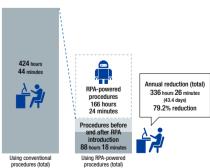
Results of Joint-Research Project with Local Government Using WinActor®

There is a strong need for work style reforms and work efficiency improvements at local government agencies. Rising to meet this need. NTT DATA partnered with the city of Tsukuba in Ibaraki Prefecture to conduct joint RPA research as part of an initiative based on the government task of using RPA to automate processes for performing the ever-increasing load of routine work tasks. NTT Group's WinActor® and WinDirector® RPA solutions were adopted for this project. RPA refers to technologies that allow software-based robots to perform routine work tasks via computers.

Upon verifying the benefits of using *WinActor*[®] to automate principal tasks performed by Tsukuba City, it was found that this solution could massively lower workloads, including a 79.2% reduction in the workload of city government employees pertaining to processing tasks involving individual and corporate municipal taxes. These results indicate the potential for RPA to perform tasks that local government agencies would have previously addressed through increased labor, either via overtime work or the hiring of temporary employees.

Armed with the insight gained through this joint-research project, NTT Group will support local governments as an IT partner to assist them in promoting work efficiency improvements and work style reforms.

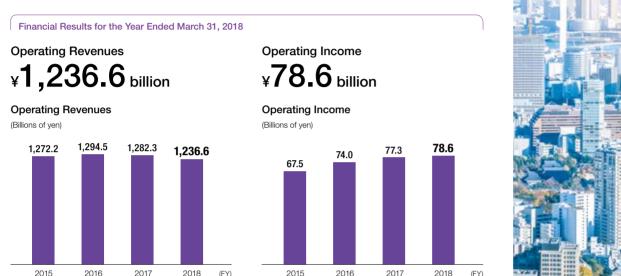
NTT DATA



Total for five routine work tasks related to individual and corporate municipal taxes measured by WinActor

Other Businesses

In other businesses, NTT Group mainly provided services related to the real estate business, the finance business, the construction and electric power business, and the system development business.



Construction and Electric Power Business



NTT FACILITIES provided one-stop solutions for buildings and energy facilities, ranging from planning and design services to construction, maintenance, operation, and upkeep services. NTT FACILITIES also utilized its technologies in the fields of ICT, energy, and construction to the fullest extent and integrated

these technologies to develop smart cities that employ natural energy and use limited energy resources in an efficient and waste-free manner and realize safe cities that are resilient to natural disasters and other risks.



Advanced Technology Development Business	Others
O NTTAT	🕐 NTTAD
O NTTElectronics))) ICR
<u>о NTT-</u> ТХ	🕐 NTTLea

Recent Project

Completion of Otemachi PLACE Large-Scale Business Center

On August 1, 2018, the construction of Otemachi PLACE was completed. This building was constructed as part of the Otemachi 2-Chome Urban Area Redevelopment Project Type 1 advanced jointly by Urban Renaissance Agency and NTT Urban Development.

Otemachi PLACE contains an office space equipped with state-of-the-art infrastructure, business This building also boasts an international conference center with the Otemachi area's largest hall

continuity plans, and ICT equipment as well as one of Japan's highest-capacity Internet data centers. Furthermore, with power source redundancy, looped district heating and cooling systems, space for accommodating individuals who cannot return home, and emergency supply stockpiles, Otemachi PLACE helps ensure business continuity within the building as well as throughout the entire Otemachi area. in its lower levels. Meanwhile, its Sunken Garden area is an open space under the building featuring numerous unique shops and restaurants. Other distinctive characteristics of the building include the Central Promenade that divides the city block and the Ryukan Sakura Footbridge constructed over the Nihonbashi River. True to its name, Otemachi PLACE has been created as a place for exchanges. breathing new life into the Otemachi area.

Going forward, NTT Urban Development will continue to take part in real estate and urban development projects that lend additional appeal to the surrounding communities and areas.

Details of Major Initiatives

Real Estate Business

NTTUD

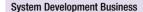
NTT Urban Development, which is the Group's only comprehensive real estate company, developed its office building and commercial facility operations, as well as residential operations, which are implemented principally through the Wellith brand. This company also used the expertise cultivated through these businesses to advance global operations and conduct the development and operation of hotel resort facilities.



Finance Business



As the core finance company of NTT Group, NTT FINANCE provided leasing, installment payment, financing, and other financial services that are compatible with diversifying needs, changes in the economic climate, and the progress of globalization. NTT FINANCE also provided billing and collection services for telecommunications service bills as well as credit card transaction settlement services.







NTT COMWARE developed its systems integration business, which targets NTT Group as well as other customers. In this business, NTT COMWARE leveraged the strengths of the superior technological prowess and expertise that it has used to support Japan's largest telecommunications carrier business as one of NTT Group's IT companies. With regard to customers outside of NTT Group. NTT COMWARE expanded the range of industries it serves to include the financial and distribution industries, among others, and also developed solutions utilizing AI, deep learning, and other cutting-edge technologies.



etc



Otemachi PLACE WEST TOWER (photograph taken in August 2018)

NTT Group Topics (Fiscal year ended March 31, 2018)

In accordance with the "Towards the Next Stage 2.0," Medium-Term Management Strategy, each segment implemented initiatives to accelerate the process of self-transformation to become "Your Value Partner" and to return NTT Group to a profit growth track.



Financial Summary

Nippon Telegraph and Telephone Corporation and its subsidiaries Fiscal years ended March 31 NTT Group has applied International Financial Reporting Standards

nternational Einancial Reporting Standards (IERS) beginning with the three months ended June 30, 2018

NTT Group has applied International Financial Reporting Standards (IFRS) beginning with the three months ended June 30, 2018.						Billions of yen				
U.S. GAAP	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Profit and loss (For the year)										
Operating revenues	¥10,416.3	¥10,181.4	¥10,305.0	¥10,507.4	¥10,700.7	¥10,925.2	¥11,095.3	¥11,541.0	¥11,391.0	¥11,799.6
Operating expenses	9,306.6	9,063.7	9,090.1	9,284.4	9,498.8	9,711.5	10,010.8	10,192.8	9,851.2	10,156.7
Operating income	1,109.8	1,117.7	1,214.9	1,223.0	1,202.0	1,213.7	1,084.6	1,348.1	1,539.8	1,642.8
Other income (expenses)	(4.6)	2.4	(39.1)	16.4	(4.3)	80.5	(17.9)	(18.9)	(12.0)	112.8
Income before income taxes and equity in earnings (losses) of affiliated companies	1,105.2	1,120.1	1,175.8	1,239.3	1,197.6	1,294.2	1,066.6	1,329.3	1,527.8	1,755.6
Income tax expense	371.3	452.9	474.6	583.2	474.0	486.5	397.3	354.8	468.4	541.9
Equity in earnings (losses) of affiliated companies	(0.7)	14.7	0.7	(7.6)	(16.1)	(50.8)	5.9	5.8	(0.0)	5.6
Net income	733.2	681.9	701.9	648.6	707.6	756.9	675.2	980.2	1,059.4	1,219.3
Less—Net income attributable to non-controlling interests	194.5	189.6	192.2	180.9	185.7	171.4	157.1	242.5	259.2	309.6
Net income attributable to NTT	¥ 538.7	¥ 492.3	¥ 509.6	¥ 467.7	¥ 521.9	¥ 585.5	¥ 518.1	¥ 737.7	¥ 800.1	¥ 909.7
Balance sheet (At year-end)										
Net property, plant and equipment	¥10,201.5	¥10,057.5	¥ 9,900.6	¥ 9,806.4	¥ 9,776.7	¥ 9,839.7	¥ 9,801.5	¥ 9,551.9	¥ 9,719.0	¥ 9,821.1
Total assets	18,796.4	18,939.1	19,665.6	19,389.7	19,549.1	20,284.9	20,702.4	21,035.9	21,250.3	21,675.8
Total current liabilities	3,694.2	3,588.3	3,689.1	3,494.3	3,499.4	3,676.8	3,721.7	3,741.1	4,131.4	4,239.0
Total long-term liabilities	5,956.6	5,579.9	5,895.6	5,847.7	5,527.7	5,657.4	5,902.7	6,009.6	5,560.4	5,354.3
Capital stock (common stock plus additional paid-in capital)	3,779.0	3,776.9	3,772.0	3,770.1	3,765.6	3,765.0	3,784.7	3,817.5	3,800.0	3,791.6
Total NTT shareholders' equity	7,298.1	7,788.2	8,020.7	7,882.6	8,231.4	8,511.4	8,681.9	8,833.8	9,052.5	9,486.0
Non-controlling interests	1,847.5	1,982.7	2,060.2	2,165.1	2,290.6	2,413.5	2,368.0	2,406.3	2,455.3	2,546.6
Total equity	¥ 9,145.6	¥ 9,770.9	¥10,080.9	¥10,047.7	¥10,522.0	¥10,924.8	¥11,049.8	¥11,240.1	¥11,507.8	¥12,032.6
Cash flows (For the year)										
Net cash provided by operating activities	¥ 2,514.1	¥ 2,817.8	¥ 2,830.9	¥ 2,508.3	¥ 2,453.7	¥ 2,727.9	¥ 2,391.8	¥ 2,711.8	¥ 2,917.4	¥ 2,637.5
Net cash used in investing activities	(2,269.7)	(2,308.9)	(2,052.2)	(1,971.2)	(1,776.3)	(2,106.8)	(1,868.6)	(1,759.8)	(2,089.3)	(1,841.8)
Net cash provided by (used in) financing activities	¥ (353.3)	¥ (651.3)	¥ (249.6)	¥ (948.1)	¥ (745.2)	¥ (622.4)	¥ (678.0)	¥ (707.6)	¥ (981.5)	¥ (931.7)
Other financial data, performance indicators, etc.										
Interest-bearing liabilities	¥ 4,899.3	¥ 4,491.7	¥ 4,553.5	¥ 4,274.0	¥ 4,036.0	¥ 4,200.0	¥ 4,406.7	¥ 4,163.3	¥ 4,088.2	¥ 3,854.8
D/E ratio	67.1%	57.7%	56.8%	54.2%	49.0%	49.3%	50.8%		45.2%	40.6%
Capital investment (For the year) ⁽¹⁾	2,145.1	1,987.1	1,870.1	1,946.6	1,970.0	1,892.8	1,817.5		1,700.0	1,674.8
Capex to sales (%)	20.6%	19.5%	18.1%	18.5%	18.4%	17.3%	16.4%	14.6%	14.9%	14.2%
Depreciation and amortization (For the year)	2,139.2	2,012.1	1,962.5	1,910.7	1,899.2	1,880.3	1,828.0			1,339.4
Research and development expenses (For the year)	268.2	278.1	268.2	267.9	269.2	249.3	233.8	213.4		213.9
EBITDA	3,383.4	3,249.3	3,286.0	3,234.1	3,244.2	3,204.2	3,063.4	3,277.9	3,183.3	3,215.8
EBITDA margin ⁽¹⁾	32.5%	31.9%	31.9%	30.8%	30.3%	29.3%	27.6%	28.4%	27.9%	27.3%
Free cash flows	244.4	508.9	778.7	537.1	677.4	621.1	523.2	952.0	828.1	795.7
Employees (Thousands) (At year-end)	196	195	219	224	227	240	242	241	275	283
Weighted average number of shares outstanding ⁽²⁾	2,690,604,822	2,646,524,966	2,646,346,778	2,551,038,800	2,423,761,538	2,299,516,428	2,187,360,018	2,105,782,828	2,046,678,144	1,995,912,757
Cash dividends, applicable to earnings for the year ⁽²⁾	55.00	60.00	60.00	70.00	80.00	85.00	90.00	110.00	120.00	150.00
Dividend payout ratio (%)	27.5%	32.3%	31.2%	38.2%	37.2%	33.4%	38.0%	31.4%	30.7%	32.9%
ROE (%)	7.3%	6.5%	6.4%	5.9%	6.5%	7.0%	6.0%	8.4%	8.9%	9.8%
EPS (Yen) ⁽²⁾	200.21	186.00	192.58	183.34	215.34	254.61	236.85	350.34	390.94	455.78

(1) Please refer to Reconciliation of Capital Investment and Reconciliation of EBITDA Margin on page 89.

• Capital investment is on an accrual basis for the acquisition of property, plant and equipment.

• From the fiscal year ended March 31, 2017, the method for calculating EBITDA has been revised.

EBITDA engin = (Operating income + Depreciation + Description and amortization + Loss on sales of property, plant and equipment + Impairment loss EBITDA margin = (Operating income + Depreciation + Loss on sales of property, plant and equipment + Impairment loss) / Operating revenues × 100

(2) Adjusted for the 2-for-1 stock split with an effective date of July 1, 2015.

	Billions of yen
IFRS	2018
Profit and loss (For the year)	
Operating revenues	¥11,782.1
Operating expenses	10,141.1
Operating profit	1,641.1
Share of profit (loss) of entities accounted for using equity method	5.0
Profit (loss) before tax	1,740.5
Income taxes	533.8
Profit	1,206.7
Less-Profit attributable to non-controlling interests	308.8
Profit attributable to NTT	¥ 897.9
Balance sheet (At year-end)	
Property, plant and equipment	¥ 8,812.2
Total assets	21,541.4
Total current liabilities	4,622.4
Total non-current liabilities	5,353.4
Capital stock (common stock plus additional paid-in capital)	3,334.5
Total NTT shareholders' equity	9,062.8
Non-controlling interests	2,503.0
Total equity	¥11,565.7
Cash flows (For the year)	
Net cash provided by operating activities	-
Net cash used in investing activities	-
Net cash provided by (used in) financing activities	-
Other financial data, performance indicators, etc.	
Interest-bearing liabilities	¥ 3,971.6
D/E ratio	43.8%
Capital investment (For the year)	1,697.9
Capex to sales (%)	14.4%
Depreciation and amortization (For the year)	1,346.9
Research and development expenses (For the year)	-
EBITDA	3,237.1
EBITDA margin	27.5%
Free cash flows	-
Employees (Thousands) (At year-end)	283
Weighted average number of shares outstanding	1,995,912,757
Cash dividends, applicable to earnings for the year	150.00
Dividend payout ratio (%)	33.3%
ROE (%)	_
EPS (Yen)	449.86

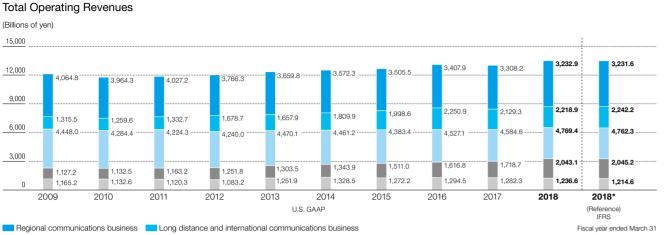
* Financial results based on IFRS have not been audited, and are provided for reference only. These figures are subject to change, pending results of the independent financial audit.

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Business Segment Data



Mobile communications business

Total Operating Profit



Regional communications business Mobile communications business Data communications business Other businesse

* Financial results based on IFRS have not been audited, and are provided for reference only. These figures are subject to change, pending results of the independent financial audit.

Group Data

					Billions of yen
					2018 (IFRS)
Fiscal years ended March 31	NTT East Group*1	NTT West Group*2 Cor		NTT DOCOMO (Consolidated)*4	NTT DATA (Consolidated)*4
Operating revenues	1,786.8	1,494.0	1,333.5	4,762.3	2,039.7
Operating expenses / Selling, general and administrative expenses	1,554.1	1,374.7	1,215.0	3,775.3	1,916.6
Operating profit	232.7	119.4	118.5	987.0	123.1
Profit before tax	230.3	113.6	115.8	1,141.7	122.7
Profit attributable to NTT	162.4	80.0	78.8	790.8	82.4

*1 The scope of aggregation for each of the figures presented for NTT East group is internal management figures after eliminating internal transactions between NTT East and its subsidiaries. Such figures are not audited and are provided for reference only

*2 The scope of aggregation for each of the figures presented for NTT West group is internal management figures after eliminating internal transactions between NTT West and its subsidiaries. Such figures are not audited and are provided for reference only

*3 The scope of aggregation for each of the figures presented for NTT Communications group is internal management figures after eliminating internal transactions between NTT Communications and its subsidiaries. Such figures are not audited and are provided for reference only

*4 Financial results based on IFRS have not been audited, and are provided for reference only. These figures are subject to change, pending results of the independent financial audit.

Reference Information

Reconciliation of Capital Investment

					Billions of yen
Fiscal years ended March 31	2014 (U.S. GAAP)	2015 (U.S. GAAP)	2016 (U.S. GAAP)	2017 (U.S. GAAP)	2018 (U.S. GAAP)
Payments for property, plant and equipment	¥1,486.7	¥1,444.9	¥1,265.6	¥1,301.7	¥1,308.7
Payments for acquisition of intangible fixed assets	416.6	358.2	371.9	400.1	402.0
Total	¥1,903.2	¥1,803.1	¥1,637.5	¥1,701.8	¥1,710.7
Differences between capital investment	10.5	(14.4)	(49.7)	1.8	36.0

Reconciliation of EBITDA Margin

						Billions of yen
Fiscal years ended March 31	2014 (U.S. GAAP)	2015 (U.S. GAAP)	2016 (U.S. GAAP)	2017 (U.S. GAAP)	2018 (U.S. GAAP)	2018 (IFRS)
Operating income / profit	¥ 1,213.7	¥ 1,084.6	¥ 1,348.1	¥ 1,539.8	¥ 1,642.8	¥ 1,641.1
Depreciation and amortization	1,880.3	1,828.0	1,766.3	1,462.2	1,339.4	1,346.9
Loss on sales and disposal of property, plant and equipment	98.3	108.6	130.7	107.4	71.4	71.2
Impairment losses	11.9	42.2	32.7	73.9	162.2	177.9
EBITDA	3,204.2	3,063.4	3,277.9	3,183.3	3,215.8	3,237.1
Operating revenues	¥10,925.2	¥11,095.3	¥11,541.0	¥11,391.0	¥11,799.6	¥11,782.1
EBITDA margin	29.3%	27.6%	28.4%	27.9%	27.3%	27.5%

* Financial results based on IFRS have not been audited, and are provided for reference only. These figures are subject to change, pending results of the independent financial audit.

Average monthly revenue per unit (ARPU)

Average monthly revenue per unit, or ARPU, is used to measure average monthly operating revenues on a per subscriber (user) basis. In the case of NTT Group's fixed line business, ARPU is calculated by dividing revenue items included in the operating revenues of NTT Group's regional communications business segment (i.e., fixed line (Telephone Subscriber Lines + INS-NET Subscriber Lines) and FLET'S Hikari) by the number of active subscribers to the relevant services. In the case of the mobile communications business, ARPU is calculated by dividing communications services revenue items included in operating revenues from NTT Group's mobile communications business segment, such as revenues from LTE (Xi) mobile phone services, FOMA mobile phone services, and docomo Hikari services (with certain exceptions), by the number of active users to the relevant services. The calculation of these figures excludes revenues that are not representative of monthly average usage, such as telecommunications equipment sales, activation fees, and universal service charges.

NTT believes that its ARPU figures calculated in this way provide useful information regarding the monthly average usage of its subscribers. The revenue items included in the numerators of NTT Group's ARPU figures are based on its financial results comprising its U.S. GAAP or IFRS results of operations.

Method of calculating ARPU

(a) NTT East and NTT West

- NTT computes the following two categories of ARPU for business conducted by each of NTT East and NTT West:
- IP Services
- revenues from FLET'S Hikari optional services, which are included in Supplementary Business revenues.
- provided to service providers by NTT East and NTT West.
- tion charges.

• Aggregate Fixed line ARPU (Telephone Subscriber Lines + INS-Net Subscriber Lines): Calculated based on revenues from monthly charges and call charges for Telephone Subscriber Lines and INS-Net Subscriber Lines, which are included in operating revenues from Voice Transmission Services (excluding IP Services), and revenues from FLET'S ADSL and FLET'S ISDN, which are included in operating revenues from

• FLET'S Hikari ARPU: Calculated based on revenues from FLET'S Hikari (including FLET'S Hikari optional services), which are included in operating revenues from IP Services; revenues from monthly charges, call charges, and connection device charges for Hikari Denwa; and

(1) FLET'S Hikari includes B FLET'S, FLET'S Hikari Next, FLET'S Hikari Light, FLET'S Hikari Lightplus, and FLET'S Hikari WiFi Access provided by NTT East; and B FLET'S, FLET'S Hikari Premium, FLET'S Hikari Mytown, FLET'S Hikari Next, FLET'S Hikari Mytown Next, FLET'S Hikari Light, and FLET'S Hikari WiFi Access provided by NTT West. In addition, FLET'S Hikari also includes the Hikari Collaboration Model, the wholesale provision of services to service providers by NTT East and NTT West. FLET'S Hikari optional services include wholesale services

(2) Aggregate Fixed Line ARPU (Telephone Subscriber Lines + INS-NET Subscriber Lines) and FLET'S Hikari ARPU do not include interconnec-

- (3) For purposes of calculating Aggregate Fixed Line ARPU (Telephone Subscriber Lines + INS-NET Subscriber Lines), the number of subscribers is determined based on the number of subscriptions for fixed line services (Telephone Subscriber Lines + INS-NET Subscriber Lines).
- (4) In terms of number of channels, transmission rate, and line use rate (base rate), INS-Net 1500 is in all cases roughly ten times greater than INS-Net 64. For this reason, for the purpose of calculating Aggregate Fixed Line ARPU (Telephone Subscriber Lines + INS-NET Subscriber Lines), one INS-Net 1500 subscription is calculated as ten INS-Net 64 subscriptions.
- (5) For purposes of calculating FLET'S Hikari ARPU, the number of subscribers is determined based on the number of FLET'S Hikari subscribers, which includes subscribers to B FLET'S, FLET'S Hikari Next, FLET'S Hikari Light, FLET'S Hikari Lightplus and FLET'S Hikari WiFi Access provided by NTT East, subscribers to B FLET'S, FLET'S Hikari Premium, FLET'S Hikari Mytown, FLET'S Hikari Next, FLET'S Hikari Mytown Next, FLET'S Hikari Light and FLET'S Hikari WiFi Access provided by NTT West, and the Hikari Collaboration Model, the wholesale provision of services to service providers by NTT East and NTT West.

(6) Numbers of active subscribers used in the ARPU calculation of NTT East and NTT West are as below: Fiscal year results: Sum of number of active subscribers {(number of subscribers at end of previous month + number of subscribers at end of the current month)/2} for each month from April to March

(b) NTT DOCOMO

The following is the formula NTT use to compute ARPU for NTT DOCOMO. Aggregate ARPU = Voice ARPU + Packet ARPU + docomo Hikari ARPU.

Voice ARPU: Voice ARPU related revenues (basic monthly charges and voice communications charges) / Number of active users Packet ARPU: Packet ARPU related revenues (basic monthly charges, packet communication charges) / Number of active users docomo Hikari ARPU: docomo Hikari ARPU related revenues (basic monthly charges, voice communication charges) / Number of active users

Note that the sum of Packet ARPU and docomo Hikari ARPU is referred to as "Data ARPU."

- (1) Numbers of active users used in the ARPU calculation of NTT DOCOMO are as described below. Sum of number of active users for each month ((number of users at the end of previous month + number of users at the end of current month) / 2) during the relevant period
- (2) The number of users used to calculate ARPU is total number of subscriptions, excluding the subscriptions listed below: Number of active users = subscriptions
- Subscriptions of communication module services, Phone Number Storage, Mail Address Storage, docomo Business Transceiver and wholesale telecommunications services and interconnecting telecommunications facilities that are provided to MVNOs, and Data Plan subscriptions in the case where the customer contracting for such subscription in his/her name also has a subscription for Xi or FOMA services in his/her name.

Note that revenues from communication module services, Phone Number Storage, Mail Address Storage, docomo Business Transceiver and wholesale telecommunications services and interconnecting telecommunications facilities that are provided to MVNOs are not included in NTT DOCOMO's ARPU calculation.

Consolidated Balance Sheets

Nippon Telegraph and Telephone Corporation and its subsidiaries March 31

ASSETS	
Current assets:	
Cash and cash equivalents	
Short-term investments	
Notes and accounts receivable, trade	
Allowance for doubtful accounts	
Accounts receivable, other	
Inventories	
Prepaid expenses and other current assets	
Deferred income taxes	
Total current assets	
Property, plant and equipment:	
Telecommunications equipment	
Telecommunications service lines	
Buildings and structures	
Machinery, vessels and tools	
Land	
Land Construction in progress	
Land	

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Current liabilities:
Short-term borrowings
Current portion of long-term debt
Accounts payable, trade
Current portion of obligations under capital leases
Accrued payroll
Accrued taxes on income
Accrued consumption tax
Advances received
Other
Total current liabilities

Long-term debt (excluding current portion)
Obligations under capital leases (excluding current portion)
Liability for employees' retirement benefits
Accrued liabilities for point programs
Deferred income taxes
Other
Total long-term liabilities
Redeemable noncontrolling interests:

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U.S. GAAP ASSETS Current assets: Cash and cash equivalents Short-term investments Notes and accounts receivable, trade	2017 ¥ 925,213 63,844 2,699,708 (48,626) 505,145	Year Year ¥ 780,300 31,641
Current assets: Cash and cash equivalents Short-term investments	63,844 2,699,708 (48,626)	31,641
Cash and cash equivalents Short-term investments	63,844 2,699,708 (48,626)	31,641
Short-term investments	63,844 2,699,708 (48,626)	31,641
	2,699,708 (48,626)	
	(48,626)	
		2,976,467
Allowance for doubtful accounts	505,145	(52,332)
Accounts receivable, other Inventories	065.070	662,190
	365,379	393,582
Prepaid expenses and other current assets Deferred income taxes	573,170 228,590	575,704
Total current assets	5.312.423	5.367.552
	0,012,420	0,007,002
Property, plant and equipment:		
Telecommunications equipment	11,046,115	10,917,851
Telecommunications service lines	16,064,732	14,217,566
Buildings and structures	6,147,869	6,280,584
Machinery, vessels and tools	2,032,389	2,127,201
Land	1,292,685	1,307,985
Construction in progress	421,819	438,604
Subtotal	37,005,609	35,289,791
Accumulated depreciation	(27,286,588)	(25,468,698)
Net property, plant and equipment	9,719,021	9,821,093
		.,. ,
Investments and other assets:		
Investments in affiliated companies	484,596	502,936
Marketable securities and other investments	495,290	525,170
Goodwill	1,314,645	1,329,275
Software	1,209,485	1,223,985
Other intangible assets	453,918	394,489
Other assets	1,492,076	1,590,636
Deferred income taxes	768,871	920,634
Total investments and other assets	6,218,881	6,487,125
Total assets	¥ 21,250,325	¥ 21,675,770
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term borrowings	¥ 227,207	¥ 270,743
Current portion of long-term debt	681,904	624,385
Accounts payable, trade	1,612,996	1,613,516
Current portion of obligations under capital leases	14,430	12,567
Accrued payroll	443,308	460,357
Accrued taxes on income	239,755	245,326
Accrued consumption tax	75,083	88,420
Advances received	324,342	374,444
Other	512,368	549,263
Total current liabilities	4,131,393	4,239,021
Long-term liabilities:		
Long-term debt (excluding current portion)	3,168,478	2,947,945
Obligations under capital leases (excluding current portion)	25,568	22,587
Liability for employees' retirement benefits	1,599,381	1,619,907
Accrued liabilities for point programs	103,047	105,037
Deferred income taxes	166,751	128,833
Other	497,132	529,959
Total long-term liabilities	5,560,357	5,354,268
Redeemable noncontrolling interests:	50,819	49,930
Equity:		
Nippon Telegraph and Telephone Corporation ("NTT") shareholders' equity		
Common stock, no par value	937,950	937,950
Additional paid-in capital	2,862,035	2,853,613
Retained earnings	5,626,155	6,260,631
Accumulated other comprehensive income (loss)	1,562	44,529
Treasury stock, at cost	(375,223)	(610,742)
Total NTT shareholders' equity	9,052,479	9,485,981
Noncontrolling interests	2,455,277	2,546,570
Total equity	11,507,756	12,032,551
Total liabilities and equity	¥ 21,250,325	¥ 21,675,770
Per share of common stock (Voc)		
Per share of common stock (Yen) Nippon Telegraph and Telephone Corporation ("NTT") shareholders' equity	¥ 4,491.73	¥ 4 910 50
Hippon Horzyraph and relephone Corporation (1911) Sharehoider's equity	Ŧ 4,491.73	¥ 4,812.59

Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Nippon Telegraph and Telephone Corporation and its subsidiaries Year ended March 31

Consolidated Statements of Income

nsolidated Statements of Income		lions of yen	
U.S. GAAP	2017	2018	
Operating revenues:			
Fixed voice related services	¥ 1,233,885	¥ 1,146,901	
Mobile voice related services	865,293	942,183	
IP / packet communications services	3,808,972	3,801,771	
Sale of telecommunication equipment	806,493	843,548	
System integration	3,041,587	3,443,147	
Other	1,634,786	1,622,037	
	11,391,016	11,799,587	
Operating expenses:			
Cost of services (excluding items shown separately below)	2,487,588	2,348,541	
Cost of equipment sold (excluding items shown separately below)	879,725	915,540	
Cost of system integration (excluding items shown separately below)	2,161,007	2,471,347	
Depreciation and amortization	1,462,235	1,339,423	
Impairment losses			
Goodwill	53,294	18,864	
Metal cables	_	124,800	
Other	20,558	18,505	
Selling, general and administrative expenses	2,786,820	2,919,724	
	9,851,227	10,156,744	
Operating income	1,539,789	1,642,843	
Other income (expenses):			
Interest and amortization of bond discounts and issue costs	(37,761)	(32,188)	
Interest income	17,753	19,094	
Income from arbitration award	-	147,646	
Other, net	7,988	(21,771)	
	(12,020)	112,781	
Income before income taxes and equity in earnings (losses)			
of affiliated companies	1,527,769	1,755,624	
Income tax expense (benefit):			
Current	472,711	532,525	
Deferred	(4,341)	9,339	
	468,370	541,864	
Income before equity in earnings (losses) of affiliated companies	1,059,399	1,213,760	
Equity in earnings (losses) of affiliated companies	(21)	5,551	
Net income	1,059,378	1,219,311	
Less—Net income attributable to noncontrolling interests	259,249	309,616	
Net income attributable to NTT	¥ 800,129	¥ 909,695	

	Shares	or yen
U.S. GAAP	2017	2018
Per share of common stock:		
Weighted average number of shares outstanding (shares)	2,046,678,144	1,995,912,757
Net income attributable to NTT (yen)	¥390.94	¥455.78
Cash dividends to be paid to shareholders of record date (yen)	¥120.00	¥150.00

Consolidated Statements of Comprehensive Income

	Millions	s of yen
U.S. GAAP	2017	2018
Net income	¥1,059,378	¥1,219,311
Other comprehensive income (loss), net of tax		
Unrealized gain (loss) on securities	12,308	25,720
Unrealized gain (loss) on derivative instruments	495	1,982
Foreign currency translation adjustments	(24,657)	9,419
Pension liability adjustments	91,034	23,712
Total other comprehensive income (loss)	79,180	60,833
Total comprehensive income (loss)	1,138,558	1,280,144
Less-Comprehensive income attributable to noncontrolling interests	278,358	324,131
Total comprehensive income (loss) attributable to NTT	¥ 860,200	¥ 956,013

Consolidated Statements of Changes in Equity

Nippon Telegraph and Telephone Corporation and its subsidiaries Year ended March 31

	Millions of yen								
		NTT shareholders' equity							
U.S. GAAP	Common stock	Additional paid-in capital	Retained earnings	compre	nulated other hensive ne (loss)	Treasury stock, at cost	Total	Noncontrolling interests	Total equity
Year Ended March 31, 2017									
At beginning of year	¥937,950	¥2,879,560	¥5,074,234	¥ (5	57,055)	¥ (883)	¥8,833,806	¥2,406,276	¥11,240,082
Adjustments due to change in fiscal year end of consolidated subsidiaries			(214)		(1,454)		(1,668)	(1,408)	(3,076)
At beginning of year (as adjusted)	937,950	2,879,560	5,074,020	(5	58,509)	(883)	8,832,138	2,404,868	11,237,006
Net income			800,129				800,129	257,593	1,057,722
Other comprehensive income (loss)				6	60,071		60,071	20,389	80,460
Cash dividends			(247,994)				(247,994)	(113,167)	(361,161)
Changes in NTT's ownership interest in subsidiaries		(18,700)					(18,700)	(114,406)	(133,106)
Stock compensation transactions		1,175					1,175		1,175
Acquisition of treasury stock						(374,348)	(374,348)		(374,348)
Resale of treasury stock						8	8		8
At end of year	¥937,950	¥2,862,035	¥5,626,155	¥	1,562	¥(375,223)	¥9,052,479	¥2,455,277	¥11,507,756
Year Ended March 31, 2018									
At beginning of year	¥937,950	¥2,862,035	¥5,626,155	¥	1,562	¥(375,223)	¥9,052,479	¥2,455,277	¥11,507,756
Adjustments due to change in fiscal year end of consolidated subsidiaries			964		(3,351)		(2,387)	(2,012)	(4,399)
At beginning of year (as adjusted)	937,950	2,862,035	5,627,119		(1,789)	(375,223)	9,050,092	2,453,265	11,503,357
Net income			909,695				909,695	307,980	1,217,675
Other comprehensive income (loss)				4	16,318		46,318	14,101	60,419
Cash dividends			(271,405)				(271,405)	(126,362)	(397,767)
Changes in NTT's ownership interest in subsidiaries		(1,836)					(1,836)	(102,414)	(104,250)
Stock compensation transactions		(6,587)					(6,587)		(6,587)
Acquisition of treasury stock						(235,531)	(235,531)		(235,531)
Resale of treasury stock		1				12	13		13
Adjustment of redeemable noncontroling interests to redemption value			(4,778)				(4,778)		(4,778)
At end of year	¥937,950	¥2,853,613	¥6,260,631	¥ 4	14,529	¥(610,742)	¥9,485,981	¥2,546,570	¥12,032,551

 * Changes in the redeemable noncontrolling interest are not included in the table.

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Consolidated Statements of Cash Flows

Nippon Telegraph and Telephone Corporation and its subsidiaries Year ended March 31

		Millions of ye	511	
U.S. GAAP		2017		2018
Cash flows from operating activities:				
Net income	¥ 1	,059,378	¥1	1,219,311
Adjustments to reconcile net income to net cash provided by operating activities—				
Depreciation and amortization	1	,462,235	-	1,339,423
Impairment losses	I	73,852		162,169
Deferred taxes		(4,341)		9,339
Losses on disposals of property, plant and equipment		105,790		69,585
Gains on sales of property, plant and equipment		(15,633)		(9,201
Equity in (earnings) losses of affiliated companies		21		(5,551
(Increase) decrease in notes and accounts receivable, trade		63,842		(231,84
(Increase) decrease in inventories		(731)		(44,49
(Increase) decrease in other current assets		(30,143)		(139,684
Increase (decrease) in accounts payable, trade and accrued payroll		52,872		12,43
Increase (decrease) in accounts payable, trade and accound payroli Increase (decrease) in accrued consumption tax		(7,258)		12,43
Increase (decrease) in advances received		36,925		52,790
Increase (decrease) in accrued taxes on income		(8,931)		7,51
Increase (decrease) in other current liabilities		8,934		72,82
Increase (decrease) in fability for employees' retirement benefits		7,133		35,93
Increase (decrease) in other long-term liabilities		41,785		21,70
Other		71,627		
Net cash provided by operating activities	0			52,37 2,637,54
Cash flows from investing activities:	2	2,917,357	4	2,037,34
-	(1	201 607)	(*	1 209 72
Payments for property, plant and equipment	(1	,301,697)	(1,308,72
Payments for intangibles		(400,110)		(401,99
Proceeds from sales of property, plant and equipment		24,920		15,84
Payments for purchases of non-current investments		(40,344)		(53,84
Proceeds from sales and redemptions of non-current investments		58,835		27,01
Acquisitions of subsidiaries, net of cash acquired		(329,005)		(19,614
Payments for purchases of short-term investments		(178,939)		(208,04
Proceeds from redemptions of short-term investments		146,132		249,987
Other	10	(69,103)		(142,40)
Net cash used in investing activities	(2	2,089,311)	(1,841,77
Cash flows from financing activities:		200.464		440.00
Proceeds from issuance of long-term debt		320,464		440,90
Payments for settlement of long-term debt		(485,612)		(635,90
Proceeds from issuance of short-term debt		,987,795		6,810,89
Payments for settlement of short-term debt		,897,024)	(6	6,769,488
Dividends paid		(247,994)		(271,40
Proceeds from sale of (payments for acquisition of) treasury stock, net		(374,436)		(235,57)
Acquisitions of shares of subsidiaries from noncontrolling interests		(155,905)		(132,466
Other		(128,799)		(138,62
Net cash used in financing activities		(981,511)		(931,658
Effect of exchange rate changes on cash and cash equivalents		(6,959)		(3,10)
Net increase (decrease) in cash and cash equivalents		(160,424)		(138,994
Cash and cash equivalents at beginning of year	I	,088,275		925,213
Increase (decrease) in cash and cash equivalents due to change in fiscal year end of consolidated subsidiaries		(2,638)		(5,919
Cash and cash equivalents at end of year	¥	925,213	¥	780,30
Cash paid during the year for:				
Interest	¥	37,339	¥	32,26
Income taxes, net		468,357		575,94
Noncash investing and financing activities:				
Capital lease obligations incurred during the year		16,809		13,594
Cancellation of treasury stock	¥	-	¥	_

Operating and Financial Review

Operating Revenues and Expenses

Operating Revenues

NTT Group's operating revenues are divided into six service categories, comprising fixed voice related services, mobile voice related services, IP/packet communications services, sales of telecommunications equipment, system integration and other.

Operating revenues in the fiscal year ended March 31, 2018 increased 3.6% from the previous fiscal year to ¥11,799.6 billion. This increase was due to such factors as an increase in revenues in the data communications business segment, primarily due to overseas sales, and an increase in revenues in the mobile communications business segment, primarily due to the expansion of mobile communications.

Operating revenues for each service category for the fiscal year ended March 31, 2018 are summarized as follows:

Fixed Voice Related Services

NTT Group's fixed voice related services include a portion of the services it provides in the regional communications business segment and long distance and international communications business segment, such as telephone subscriber lines, INS-Net, conventional leased circuits and high speed digital.

Fixed voice related revenues for the fiscal year ended March 31, 2018 decreased 7.0% from the previous fiscal year to ¥1,146.9 billion, accounting for 9.7% of total operating revenues. This decrease was due to a continued decline in the number of subscriptions for telephone subscriber lines and INS-Net caused by the increased popularization of mobile phones and optical IP telephones, and an increase in free or low-priced communications services offered by OTT operators (content distribution services utilizing other companies' communications infrastructure, allowing a service provider to distribute services without owning its own communications infrastructure).

Mobile Voice Related Services

Mobile voice related services include a portion of the services NTT Group provides in the mobile communications business segment, such as LTE (Xi).

Mobile voice related revenues for the fiscal year ended March 31, 2018 increased 8.9% from the previous fiscal year to ¥942.2 billion, accounting for 8.0% of total operating revenues. This increase was due to, among other things, an increased number of subscriptions for the *Kakehodai & Pake-aeru* billing plan.

IP / Packet Communications Services

NTT Group's IP/packet communications services include a portion of the services it provides in the regional communications business segment, such as FLET'S Hikari, a portion of the services it provides in the long distance and international communications business segment, such as Arcstar Universal One, IP-VPN, and OCN, as well as a portion of the services it provides in the mobile communications business segment, such as LTE (*XI*) packet communications services.

In the fiscal year ended March 31, 2018, revenues from IP/packet communications services decreased 0.2% from the previous fiscal year to ¥3,801.8 billion, accounting for 32.2% of total operating revenues. This decrease was due to, among other things, the increased number of transfers to the *Hikari Collaboration Model* in the regional

communications business segment and a decrease in revenues in the mobile communications business segment due to strengthened efforts to enhance returns to customers, despite the continued increase in the number of *docomo Hikari* subscriptions in the mobile communications business segment.

Sales of Telecommunications Equipment

This category includes a portion of the services NTT Group provides in the mobile communications business segment and the regional communications business segment.

In the fiscal year ended March 31, 2018, revenues from telecommunications equipment sales increased 4.6% from the previous fiscal year to ¥843.5 billion, accounting for 7.1% of total operating revenues. This increase was primarily due to an increased number of wholesale sales of handsets, such as smartphones, in the mobile communications business segment.

System Integration

NTT Group's system integration services include its data communications business segment and a portion of the services it provides in the long distance and international communications business segment and the regional communications business segment.

In the fiscal year ended March 31, 2018, revenues from system integration increased 13.2% from the previous fiscal year to ¥3,443.1 billion, accounting for 29.2% of total operating revenues. This increase was due to factors such as the impact of the expansion of consolidated subsidiaries resulting from the acquisition of the former Dell Services Division and the expanded scope of business in the data communications business segment.

Other

Other services principally comprise building maintenance, real estate rentals, systems development, leasing activities and the smart life area in the mobile communications business segment.

In the fiscal year ended March 31, 2018, revenues from other services decreased 0.8% from the previous fiscal year to ¥1,622.0 billion, accounting for 13.7% of total operating revenues. This decrease was due mainly to a decrease in revenues associated with real estate business in the other business segment.

Operating Expenses

Operating expenses in the fiscal year ended March 31, 2018 increased 3.1% from the previous fiscal year to ¥10,156.7 billion. The reasons for the increase are discussed below. Personnel expenses and expenses for purchase of goods and services and other expenses, described below, are included in cost of services, cost of equipment sold, cost of system integration, and selling, general and administrative expenses in the consolidated statements of income.

Personnel Expenses

Personnel expenses in the fiscal year ended March 31, 2018 increased 5.8% from the previous fiscal year to ¥2,408.3 billion. This increase was mainly due to the increase in personnel expenses as a result of the effect of the expansion of consolidated subsidiaries in the data communications business segment, despite a decrease in personnel expenses due to employee retirements in the regional communications business segment.

The fiscal year ended March 31, 2018, compared with the fiscal year ended March 31, 2017

	Billions of yen			
Fiscal year ended March 31	2017	2018	Change	Percent change
Operating revenues:	¥11,391.0	¥11,799.6	408.6	3.6%
Fixed voice-related services	1,233.9	1,146.9	(87.0)	(7.0)%
Mobile voice-related services	865.3	942.2	76.9	8.9%
IP / Packet communications services	3,809.0	3,801.8	(7.2)	(0.2)%
Sales of telecommunications equipment	806.5	843.5	37.1	4.6%
System integration	3,041.6	3,443.1	401.6	13.2%
Other	1,634.8	1,622.0	(12.7)	(0.8)%
Operating expenses	9,851.2	10,156.7	305.5	3.1%
Operating income	1,539.8	1,642.8	103.1	6.7%
Other income (expenses)	(12.0)	112.8	124.8	_
Income before income taxes and equity in earnings (losses) of affiliated companies	1,527.8	1,755.6	227.9	14.9%
Income tax expense (benefit)	468.4	541.9	73.5	15.7%
Equity in earnings (losses) of affiliated companies	(0.0)	5.6	5.6	_
Net income	1,059.4	1,219.3	159.9	15.1%
Less-Net income attributable to noncontrolling interests	259.2	309.6	50.4	19.4%
Net income attributable to NTT	800.1	909.7	109.6	13.7%

Expenses for Purchase of Goods and Services and Other Expenses

In the fiscal year ended March 31, 2018, expenses for purchase of goods and services and other expenses increased 4.5% from the previous fiscal year to ¥5,866.6 billion. This increase was mainly due to the impact of the expansion of consolidated subsidiaries in the data communications business segment and an increase in revenue-linked expenses resulting from an increase in wholesale sales in the mobile communications business segment.

Depreciation and Amortization Expenses

Depreciation and amortization expenses in the fiscal year ended March 31, 2018 decreased 8.4% from the previous fiscal year to ¥1,339.4 billion. This decrease was mainly due to the fact that the accelerated depreciation of prior-generation equipment that was recorded in the fiscal year ended March 31, 2017 was not recorded in the fiscal year ended March 31, 2018.

Operating Income

As a result of the foregoing, operating income for the fiscal year ended March 31, 2018 increased 6.7% from the previous fiscal year to ¥1,642.8 billion.

Other Operating Revenues and Expenses

Other Income (Expenses)

Other income for the fiscal year ended March 31, 2018 was ¥112.8 billion compared to other expenses of ¥12.0 billion for the previous fiscal year.

Income before Income Taxes and Equity in Earnings (Losses) of Affiliated Companies

Net income before income taxes in the fiscal year ended March 31, 2018 increased 14.9% from the previous fiscal year to ¥1,755.6 billion for the reasons discussed above.

Income Tax Expense (Benefit)

In the fiscal year ended March 31, 2018, income tax expense increased 15.7% from the previous fiscal year to ¥541.9 billion. This increase was due to an increase in net income before income taxes, in addition to other factors. As a result, effective tax rates for the fiscal year ended March 31, 2017 and for the fiscal year ended March 31, 2018 were 30.66% and 30.86%, respectively.

Equity in Earnings (Losses) of Affiliated Companies

Equity in earnings (losses) of affiliated companies for the fiscal year ended March 31, 2018 was ± 5.6 billion compared to $\pm (0.0)$ billion for the previous fiscal year.

Net Income and Net Income Attributable to NTT Medium-Term Financial Targets

As a result, net income for the fiscal year ended March 31, 2018 increased 15.1% from the previous fiscal year to ¥1,219.3 billion. Net income attributable to NTT (excluding the portion attributable to non-controlling interests) for the fiscal year ended March 31, 2018 increased 13.7% from the previous fiscal year to ¥909.7 billion.

In line with its Medium-Term Management Strategy "Towards the Next Stage 2.0," NTT Group has continued to reform its business structure.

Regarding the financial targets of the Medium-Term Management Strategy from the fiscal year ended March 31, 2016 through the fiscal year ended March 31, 2018, in the fiscal year under review, the target fiscal year, EPS (earnings per share), the most important target, reached ¥456, achieving the target of ¥400 or more. In terms of the other targets, regarding capital investment in the domestic network business, NTT Group reduced costs by ¥204.9 billion compared to its target of ¥200.0 billion or more, and regarding fixed-line/mobile access-related costs, NTT Group reduced costs by ¥856.0 billion compared to its target of ¥800.0 billion or more, achieving both targets. Furthermore, overseas sales and overseas operating income totaled US\$19.5 billion and US\$1.0 billion, respectively, compared to targets of US\$22.0 billion and US\$1.5 billion. NTT Group will continue to work to achieve its targets.

While continuing to focus on profit growth by promoting the initiatives described below, NTT Group will also increase its capital effi-

ciency through stock repurchases and other measures, aiming to further grow its EPS.

- Notes: 1. Increased efficiency in capital investment (domestic network business) is in comparison to the fiscal year ended March 31, 2015 and excludes NTT Communications' data centers and certain other assets.
 - Cost reductions (fixed-line/mobile access-related) are in comparison to the fiscal year ended March 31, 2015 and exclude the impact of the change of depreciation method for property, plant and equipment.
 - Overseas operating income excludes M&A-related temporary expenses, such as depreciation costs of intangible fixed assets.

Liquidity and Capital Resources

Financing, Capital Resources and Use of Funds

Net cash provided by operating activities during the fiscal year ended March 31, 2018, excluding the effect of a non-business day, amounted to ¥2,869.5 billion, a decrease of ¥47.9 billion from ¥2,917.4 billion in the fiscal year ended March 31, 2017. This decrease was primarily due to a decrease in the amount of accounts receivable collected in the fiscal year ended March 31, 2018 compared to the fiscal year ended March 31, 2017. Net cash provided by operating activities during the fiscal year ended March 31, 2018, was ¥2,637.5 billion.

NTT Group used the net cash provided by operating activities mainly to acquire property, plant and equipment, pay dividends and complete stock repurchases.

Net cash used in investing activities during the fiscal year ended March 31, 2018 amounted to ¥1,841.8 billion, a decrease of ¥247.5 billion from ¥2,089.3 billion in the fiscal year ended March 31, 2017. This decrease was due to, among other things, a decrease of ¥309.4 billion in expenditures on acquisitions of subsidiaries, despite an increase of ¥8.9 billion in investments for property, plant and equipment and intangibles on a cash basis.

The increase in payments for investments in property, plant and equipment and intangibles for the fiscal year ended March 31, 2018 resulted from, among other things, an increase in capital expenditures due to the expansion of the scope of large-scale projects in the data communications business, despite a decrease in capital expenditures due to a reduction in fiber-optic-related capital expenditures in the regional communications business and improved efficiency in the construction of base stations in the mobile communications business. For the fiscal year ended March 31, 2018, capital investment amounted to ¥1,674.8 billion on an accrual basis, of which ¥549.6 billion was invested in the regional communications business and ¥576.4 billion was invested in the mobile communications business.

Net cash used in financing activities during the fiscal year ended March 31, 2018 amounted to ¥931.7 billion, a decrease in payments of ¥49.9 billion from ¥981.5 billion in the fiscal year ended March 31, 2017. The decrease in payments was due to, among other things, a net decrease of ¥138.9 billion in payments due to stock repurchases despite a net increase of ¥79.2 billion in expenses from the repayment of short-term and long-term debt. The capital raised from the issuance of long-term debt in the fiscal year ended March 31, 2018 Overview

Strategy

includes ¥95.9 billion in net proceeds from corporate bond offerings and an aggregate of ¥345.0 billion in loans from financial institutions.

As of March 31, 2018, the total balance of the interest-bearing liabilities of NTT Group was ¥3,854.8 billion, a decrease of ¥233.4 billion from the balance of ¥4,088.2 billion as of March 31, 2017. The ratio of interest-bearing liabilities to shareholders' equity stood at 40.6% as of March 31, 2018 (from 45.2% as of March 31, 2017). Interest-bearing liabilities as of March 31, 2018 comprised short-term debt and longterm debt, as shown in Note 14 to the Consolidated Financial Statements, as well as ¥11.8 billion in deposits received pursuant to depositary agreements.

NTT Group believes that the net cash it expects to generate from operating activities, financing from banks and other financial institutions and/or offerings of equity or debt securities in the capital markets will provide the requisite financial resources to meet NTT Group's currently anticipated capital investment and other expenditure needs and payment of debt.

For the fiscal year ending March 31, 2019, NTT Group expects to make capital investments totaling ¥1,700.0 billion on an accrual basis, due to, among other things, an increase in capital investments due to data center construction and an increase in the number of consolidated overseas subsidiaries in the long distance and international communications business, despite a decrease in capital investments related to improved efficiency in the maintenance of equipment in the regional communications business and improved efficiency in the construction of base stations in the mobile communications business. The total amount of expected capital investments includes ¥545.0 billion in the regional communications business and ¥570.0 billion in the mobile communications business. The actual amount of capital investments may be different from expected one, since capital investments may be influenced by trends in demand, the competitive environment and other factors. In addition, the actual amount of NTT Group's financing will depend on its future performance, market conditions and other factors, and is therefore difficult to predict.

nt Liquidity

As of March 31, 2018, NTT Group had cash and cash equivalents balance (including short-term investments with principal maturities of less than three months), excluding the effect of a non-business day, at the end of the fiscal year of ¥1,012.2 billion, an increase of ¥87.0 billion compared to the balance of ¥925.2 billion as of March 31, 2017. Cash equivalents represent a temporary cash surplus used to repay debts and make capital investments, among other things, and are used as working capital. Accordingly, the balance of cash equivalents fluctuates each fiscal year depending on particular financing and working capital requirements. Cash and cash equivalents at the end of year for the fiscal year ended March 31, 2018, were ¥780.3 billion.

Risk Factors

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Consolidated Subsidiaries

As of March 31, 2018

Company	Capital	Voting rights ratio	Main line(s) of business
Consolidated subsidiaries	Millions of yen	%	
G REGIONAL COMMUNICATIONS	BUSINESS	SEGMENT	
NIPPON TELEGRAPH AND TELEPHONE EAS CORPORATION	ST 335,00	0 100.00	Provision of intra-prefectural communications services in the eastern part of Japan. NTT (holding company) is making long-term capital loans to NTT East.
NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION	312,00	0 100.00	Provision of intra-prefectural communications services in the western part of Japan. NTT (holding company) is making long-term capital loans to NTT West.
S LONG DISTANCE AND INTERN	ATIONAL C		TIONS BUSINESS SEGMENT
NTT COMMUNICATIONS CORPORATION	230,97	9 100.00	Provision of inter-prefectural communications services, international communications services, and Internet-related services. NTT (holding company) is making long-term capital loans to NTT Communications.
Dimension Data Holdings	USD888.5 millio		Provision of IT system building and maintenance support for corporations
NTT Security Corporation	25,24	9 100.00	Provision of professional security services
NTT America	USD2,051.0		Provision of ICT services in North America

NTT America	USD2,051.03 million	100.00	Provision of ICT services in North America
NTT EUROPE	GBP153.83 million	100.00	Provision of ICT services in Europe
Lux e-shelter 1	EUR403.20 million	86.70	Provision of data center-related services in Europe
Arkadin International	EUR166.18 million	100.00	Provision of teleconference, web conference, and video conference services
RagingWire Data Centers	USD420.41 million	100.00	Provision of data center-related services in North America
Virtela Technology Services	USD513.53 million	100.00	Provision of network services
NETMAGIC SOLUTIONS	INR16,609.97 million	100.00	Provision of data center-related services in India
GYRON INTERNET	GBP93.00 million	84.97	Provision of data center-related services in the UK
NTT Plala Inc.	12,321	95.39	Provision of Internet connection and video distribution services
Spectrum Holdings	USD4,101.93 million	100.00	Management of Dimension Data Holdings plc's subsidiary companies in Europe

MOBILE COMMUNICATIONS BUSINESS SEGMENT NTT DOCOMO, INC. 949,679

66.65 Provision of mobile communications services and smart life area services

DATA COMMUNICATIONS	BUSINESS SEGME	INT	
NTT DATA CORPORATION	142,520	54.21	Provision of data communications systems services and network system services
NTT DATA	USD4,536.13 million	100.00	Consulting, system design, and development in North America
NTT DATA Services	USD2,114.29 million	100.00	Consulting, system design, and development in North America
EVERIS PARTICIPACIONES	EUR120.30 million	100.00	Consulting, system design, and development
NTT Data International	USD4,558.06 million	100.00	Responsible for NTT DATA's operating subsidiaries in North America

OTHER BUSINESSES NTT Urban Development Corporation 48,760 67.30 Real estate acquisition, development, construction, leasing, and management NTT FINANCE CORPORATION 16,770 100.00 Lease and installment sales of telecommunications-related devices, and billing and collection of charges for communications and other services NTT FACILITIES, INC. 12,400 100.00 Design, management, and maintenance of buildings, equipment, and electric power facilities NTT COMWARE CORPORATION 20,000 100.00 Development, production, operation, and maintenance of information communication systems and software NTT ADVANCED TECHNOLOGY 5,000 100.00 Technology transfer, technical consulting, and design and development of systems CORPORATION

Other 896 companies

Glossary of Terms

Explanations of specialized terms as used in this annual report

General Terms

Artificial intelligence

Application

Software developed and used for specific functions and purposes

Architecture

Basic design, shared specifications, or design ideology of a computer, piece of software, system, or its basic components

B2B2X

A business that supports and promotes the customer-based businesses of other companies. "B" represents the company and "X" represents customers, such as individuals, corporations, employees, and government agencies.

Bit Rate

Amount of data handled in a given time when performing continuous processing or transmission of data

Cloud / Cloud Services

Type of service whereby software and hardware can be used through a network. The service can be used on an on-demand basis without the need to purchase hardware, such as a server, or software,

Cognitive Framework

Frameworks for solving problems through a methodology using experience and insight similar to that of humans anticipated to be applicable to systems capable of producing viable information from big data

Connected Cars

Vehicles that have ICT device functionality and are anticipated to create new value by acquiring data on vehicle conditions and surrounding roads through sensors and by aggregating and analyzing this data through networks

Cyberattack

Attack that causes the functionality of the target system to fail as well as unauthorized access of a target computer or network resulting in theft, destruction, or alteration of data

Dark Web

Websites that cannot be accessed by standard Internet browsers

Data Center

Facility entrusted with servers and other systems by customers that provides operation and management services, including Internet connectivity

Deep Learning

Method of machine learning in which systems learn data characteristics to recognize and categorize phenomena and that enables systems to learn data characteristics at a very deep level, making it possible to recognize characteristics with incredibly high degrees of accuracy. It is thus anticipated that this method will be applicable to recognition of people's voices and images and video taken by cameras.

Digital Transformation

Process of creating new business models or transforming existing business models by using ICT tools to accumulate data or use data in management

Downside Risk

Risk of losses occurring

EinTech

Term combining "Finance" and "Technology." FinTech creates new financial services by integrating ICT and finance.

IaaS (Infrastructure as a Service)

Provision of equipment, communication lines, and other infrastructure necessary for operating IT systems as a service that can be accessed remotely via the Internet

■ ICT (Information and Communications Technology)

Collectively refers to technologies related to information and communications, including hardware and software used for information and communications functions of computers, and technologies used in IT systems and data communications

IoT (Internet of Things)

A network equipping not only information and communications devices, such as computers, but also all everyday objects with communication functions to connect to the Internet and communicate among themselves for functions such as automated recognition, automated operation, and remote measurement

IT-Managed Service

Service that provides integrated system management including maintenance, operation management, and malfunction response

IT-Managed Security Service

Integrated service that monitors customer networks and reports and responds to detected risks

LGBT

Initialism for "lesbian, gay, bisexual, and transgender," used as a general term for sexual minorities whose preferred partner is of the same sex or not only of a different sex, or who experience a mismatch between their assigned sex and gender identity

LTE (Long Term Evolution)

Telecommunications standard with features including high transmission speeds, large capacity, efficient use of radio waves, and low delay. Achieves high-speed telecommunication in a mobile phone at speeds on a par with optical fiber

M&A (Merger and Acquisition)

General term for business mergers and acquisitions

Moore's Law

Observation of Gordon Moore, co-founder of Intel Corporation of the United States, that computer performance (number of transistors in a dense integrated circuit) doubles about every 18 months; many commenters have recently stated that circuit density has reached its physical limit and that the trend predicted by Moore's law will not continue

Stock Information (As of March 31, 2018)

Open Platform

Hardware or software platform in which the underlying technological specifications for products or services are publicly available

Orchestrator Technologies

Technologies for automatically deploying, configuring, and managing computer systems

PaaS (Platform as a Service)

Provision of hardware, operating systems, and all other platform elements necessary for operating applications as a service that can be accessed remotely via the Internet

Protocol

System of defined rules and procedures that enables smooth transmission of signals, data, and information between multiple sources

RPA (Robotic Process Automation)

Technologies that streamline or automate white-collar labor (nonmanual labor) sometimes referred to as "digital labor"

SDGs (Sustainable Development Goals)

Set of 17 goals needing to be addressed leading up to 2030 that were approved at the UN Sustainable Development Summit held in September 2015

System Integration

Implementation of the construction and operation of information communications systems in an integrated manner, tailored to clients' operations

Traffic

Signals or data transmitted through communication lines or networks and the volume and density of such signals or data

Upside Potentia

Potential for generating profits

Virtualization Technologies

Technologies for simulating multiple virtual computers within a single computer and operating these virtual computers with differing basic software

WinActor[®] / WinDirector[®]

Made-in-Japan robotic process automation solutions based on technologies developed by NTT Laboratories in 2010 that allow for multiple robots to be operated simultaneously using multiple action scenarios through high-level robot management achieved via integrated, server-based management and control of robots and robot action scenarios created by WinActor® and WinDirector®

Terms Related to NTT Group Services

d POINT

A point service provided by NTT DOCOMO with no sign-up or annual fees that anybody can become a member of under a personal name https://www.nttdocomo.co.jp/english/service/dpoint/index.html

FLET'S Hikari

B FLET'S, FLET'S Hikari Next, FLET'S Hikari Light, FLET'S Hikari Lightplus, and FLET'S Hikari WiFi Access by NTT East; and B FLET'S, FLET'S Hikari Premium, FLET'S Hikari Mytown, FLET'S Hikari Next, FLET'S Hikari Light, and FLET'S Hikari WiFi Access by NTT West https://flets.com/english/ http://flets-w.com/english/

Hikari Collaboration Model

Model in which FLET'S Hikari and other NTT East and NTT West services are offered to various service providers on a wholesale basis

Hikari Denwa

A value-priced IP- and optical fiber-based telephone service using FLET'S Hikari

Corporate Information

Company name	NIPPON TELEGRAPH	AND			
	TELEPHONE CORPOR	ATION			
Date of establishment	April 1, 1985				
Head office	Otemachi First Square,	East Tower, 5-1,			
	Otemachi 1-Chome, Ch	niyoda-ku, Tokyo			
	100-8116, Japan				
Telephone	+81 (3) 6838-5111				
Common stock		¥937,950,000,000			
Total number of share	es authorized to				
be issued by NTT		6,192,920,900 shares			
Total number of share	es issued	2,096,394,470 shares			
Aggregate voting rights 19,684,					
Number of sharehold	ers				
(including holders of	fractional shares)	842,518			

Stock Exchange on Which the Company Is Listed

Tokyo (Stock Code: 9432)

Investor Relations

http://www.ntt.co.jp/ir/contact_e/ Telephone: +81 (3) 6838-5481

Depositary for NTT American Depositary Receipts (ADRs)

JPMorgan Chase Bank, N.A. 4 New York Plaza, Floor 12 New York, NY 10004, U.S.A.

Inquiries-

JPMorgan Service Center P.O. Box 64504 St. Paul, MN 55164-0504, U.S.A. Telephone: 1-800-990-1135 (General) 1-651-453-2128 (From outside the U.S.A.)

NTT's Share Price on the Tokyo Stock Exchange



-NTT's share price (upper left scale) - TOPIX Index (right scale) NTT's trading volume (lower left scale)

Notes: 1. NTT's stock price and TOPIX Index are the simple average closing prices on the last trading day every month. 2. NTT's trading volume refers to the number of NTT shares traded every month. 3. NTT conducted a 100-for-1 stock split of its common stock, with an effective date of January 4, 2009, and a 2-for-1 stock split of its common stock, with an effective date of July 1, 2015. NTT share prices have been adjusted to reflect the impact of these stock splits.

Principal Shareholders

	Name	Number of shares held (Thousands)	Ratio of the number of shares held to the total number of shares issued (%)
	The Minister of Finance	679,122	34.45
	Japan Trustee Services Bank, Ltd. (Trust Account)	84,566	4.29
	The Master Trust Bank of Japan, Ltd. (Trust Account)	72,864	3.70
	JPMorgan Chase Bank 380055	39,826	2.02
	Japan Trustee Services Bank, Ltd. (Trust Account 9)	28,099	1.43
0,000	Japan Trustee Services Bank, Ltd. (Trust Account 5)	26,911	1.37
	Japan Trustee Services Bank, Ltd. (Trust Account 1)	19,993	1.01
hares	Japan Trustee Services Bank, Ltd. (Trust Account 2)	19,728	1.00
hares	Moxley & Co. LLC	19,199	0.97
4.752	JPMorgan Chase Bank 385632	18,267	0.93

Notes: 1. Number of shares held is rounded down to the nearest thousand.

2. NTT's holdings of treasury stock (125,318,558 shares) are not included in the above table

3. Equity ownership percentages do not include treasury stock.

Breakdown of Shares by Shareholder

The number of shares is rounded down to the nearest thousand. The figures in parentheses represent the percentage of total shares owned for each category of shareholder



Notes: 1. NTT's holdings of treasury stock (125,318,558 shares) are not included in the above.

- 2. The percentages represent the ratio of shareholders' shares to the total number of issued shares excluding treasury stock.
- 3. "Other Corporations" above includes 29 thousand shares in the name of the Japan Securities Depository Center

Restrictions under the NTT Act

The NTT Act requires the government to own at least one-third of the total number of issued shares*. Pursuant to the NTT Act, the proportion of voting rights of foreign nationals and foreign corporations is limited to less than one-third of the total voting rights.

If the proportion of voting rights of foreign nationals and foreign corporations should exceed one-third, pursuant to the NTT Act, NTT is prohibited from registering ownership of shareholders in excess of such limit.

As of the end of March 2018, 5,721,530 of the voting rights were owned by foreign nationals and foreign corporations.

* For the time being, pursuant to Article 13 of the NTT Act, any increase in the number of shares attributable to the issuance of new shares is not included in calculating the total number of issued shares for the purposes of the NTT Act.