



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global Environment

 Respect for Human Resources

 Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

NTT Communications Corporation

# CSR Report 2018





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## Business Vision and Fundamental CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global Environment

 Respect for Human Resources

 Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

### Business Vision

# Transform. Transcend.

We provide innovative services and cutting-edge technologies that dramatically evolve and dynamically transform businesses, markets, and society. They create new value that exceeds expectations. By transcending the boundaries that limit people, they will help to realize a seamlessly connected world.

### Fundamental CSR Policy

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



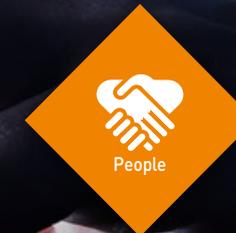
#### Contributions to Society

We shall contribute to the resolution of social issues in Japan and overseas through the development and provision of innovative ICT, while providing highly reliable services for the sustained development of society. As a group of companies that provides key infrastructure that supports society and protects our lifestyles, we shall provide secure environments for communications that are fortified against cybersecurity threats and resilient to natural disasters.



#### Contributions to the Global Environment

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



#### Respect for Human Resources

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



#### Continuous Strengthening of Corporate Governance

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

## NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

**Senior Management's Commitment**

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global Environment

 Respect for Human Resources

 Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

# We promote CSR activities that meet the expectations of society and contribute to achieving the SDGs as a global ICT service provider.

NTT Communications was born through the reorganization of NTT in 1999 and has since taken on countless challenges in the global market as a provider of worldwide telecommunications, including long-distance communication and the Internet. We have subsequently continued to serve at the frontlines of business, dealing with rapidly increasing sophistication and diversification in the development of networks and dramatic advances in cloud computing, to emerge as a global telecommunications carrier. We are now focused on providing a broad variety of ICT solutions based on our network, cloud and security services for customers around the globe.

Technological innovation continues at a blazing speed in the world of ICT, generating an endless stream of businesses and industries leveraging new technologies such as AI and IoT. As a major player in the ICT industry supporting the digital transformation of our customers, we believe that our corporate mission is to enhance the quality of infrastructures that facilitate technological innovation, construct a robust, safe and secure ICT environment, and consistently deliver cutting-edge services that address future needs, ultimately leading to the resolution of pressing social issues.

We are guided by our corporate slogan, "Transform. Transcend," which illuminates everything we do, and we are confident that our commitment to achieving dramatic evolution has sustained our growth to date. At the same time, we also believe that maintaining employee health is a prerequisite for sound corporate management. The quality of work can only improve when employees enjoy peace and security at home based on healthy minds and bodies. We refer to this commitment as "Smart Work (health and productivity management)" and promote it through multiple measures. We will continue to transform ourselves to create new working environments and work cultures that enable all of our employees to lead healthy lives while demonstrating exemplary performance based on mutual recognition of our diversity.

NTT has declared its Group-wide support for the Sustainable Development Goals (SDGs) adopted at the United Nations Summit in September 2015. As a global ICT service provider, NTT Communications will strive to live up to the trust of all our stakeholders around the world by pursuing CSR activities that provide solutions to social issues and lead to sustainable development.

**Tetsuya Shoji**

President and CEO  
NTT Communications Corporation





# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global  
Environment

 Respect for Human Resources

 Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Corporate Data



**Business Vision and Fundamental CSR Policy**

02 Business Vision and Fundamental CSR Policy

**02**



**Senior Management's Commitment**

03 We promote CSR activities that meet the expectations of society and contribute to achieving the SDGs as a global ICT service provider.

**03**



**Our Business and Sustainability**

05 Our Business Extends Across Society  
06 Our Goals for Society  
07 Identification and Improvement of Materiality  
08 Directors' Commitment

**05**



**Contributions to Society**

10 Contributions to Society  
11 Our Actions  
We solve social issues by applying cloud-based IoT to protect workers and businesses.

**10**



**Contributions to the Global Environment**

12 Contributions to the Global Environment  
13 Our Actions  
We strive to create a low-carbon society and pass on a thriving global environment to the next generation.

**12**



**Respect for Human Resources**

14 Respect for Human Resources  
15 Our Actions  
We aim to realize diverse workstyles geared to ensuring quality of life.

**14**



**Continuous Strengthening of Corporate Governance**

16 Continuous Strengthening of Corporate Governance  
17 Our Actions  
We strengthen CSIRT operations to reduce the security risks of Companywide IT systems.

**16**



**CSR Activity Achievements**

18 Fiscal 2017 Main Targets and Achievements

**18**



**Corporate Data**

23 About the Reporting Media  
Corporate Information

**23**



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental CSR Policy

Senior Management's Commitment

Contents

## Our Business and Sustainability

### Our Business Extends Across Society

- Our Goals for Society
- Identification and Improvement of Materiality
- Directors' Commitment

 Contributions to Society

 Contributions to the Global Environment

 Respect for Human Resources

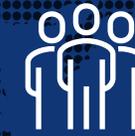
 Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

# Our Business Extends Across Society

The global cloud is supported by our world-class telecommunications network, including submarine cables, data centers and IP backbone. We provide cutting-edge services based on "Japan quality" ICT solutions for global corporations in our bid to become the partner of choice for customers everywhere.



Global Workforce

**22,050** people

## Global High-Speed Communications Network

Between Japan and the United States

**2** Tbps

Between Asia and Oceania

**5** Tbps

We provide direct connections to major service providers in Asia, Oceania, North America and Europe via the world's largest high-speed, large-capacity broadband network of 1,690 Gbps between Asia and North America and 2,627 Gbps between Asia and Oceania. We maintain reliable communication environments and stable operations based on single autonomous system (AS) networks and Service Level Agreements (SLA). (As of September 30, 2017)

## ICT Total Solutions for Businesses

**40+** Countries and Regions **110+** Locations

We have established bases in over 110 locations in more than 40 countries and regions, staffed by experts on the ICT environment of each place. (As of March 31, 2018)

# Global Tier 1\* Provider

As a World Leading Provider, We Intend to Provide the World's Highest Level of Infrastructure

\*Tier 1: An Internet service provider (ISP) that controls its own worldwide broadband IP backbone and is capable of ensuring the quality of its network without depending on an upper tier provider.

## Global Network Services

**190+** Countries and Regions

We provide global network services that extend across 190 countries and regions worldwide. (As of March 31, 2018)

## Personal Services

**7,521,000** OCN Members

With a history dating back 20 years, we provide the largest Internet connection service in Japan and promote society's conversion to ICT. (As of March 31, 2018)

## Global Data Center Service Offering the Highest Levels of Quality

**20+** Countries and Regions **400,000 m<sup>2</sup>+** Server Room Space

We provide high-quality service under our globally consistent Nexcenter brand, which delivers on over 300 facility and operational standards. In addition to constructing our own data centers, we acquire shares of data center operators and form partnership agreements with local companies in order to rapidly expand our presence and develop our service in more than 20 countries and regions, primarily in the Americas, Europe and Asia, with server room space of over 40 m<sup>2</sup>.

## Cloud Services

Asia Pacific "Leader"

We realize one-stop global cloud services by utilizing our advanced technological capabilities and wealth of know-how unique to a telecommunications carrier. We have been recognized as an industry leader for three consecutive years in U.S.-based Gartner Inc.'s cloud provider evaluation report for the Asia-Pacific region.



NTT Communications Corporation  
CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Our Business Extends Across Society  
**Our Goals for Society**  
Identification and Improvement of Materiality  
Directors' Commitment

Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

# Our Goals for Society

The NTT Communications Group is committed to addressing social issues through ICT. We believe that identifying the diverse potential risks inherent within the global society and striving to avoid or mitigate such risks are an essential part of our business activities. While we prepare for global risks as the responsibility of an ICT company that is sustained by stakeholders around the world, we also view this responsibility as an opportunity to focus on the four priority issues for realizing our goals for society.



Source: *The Global Risk Report 2018*, World Economic Forum

**Supporting the UN's SDGs as the NTT Group**

In fiscal 2016, the NTT Group announced its support for the UN's Sustainable Development Goals (SDGs). Consequently, we will also be promoting efforts to contribute to the SDGs as a member of the NTT Group from fiscal 2016 onward. We are currently raising employee awareness of the SDGs through training and CSR-related activities. Moreover, we have linked our CSR Priority Activities to the SDGs to confirm and evaluate the validity of our KPIs.

**SUSTAINABLE DEVELOPMENT GOALS**  
17 GOALS TO TRANSFORM OUR WORLD



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Our Business Extends Across Society

Our Goals for Society

**Identification and Improvement of Materiality**

Directors' Commitment

Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

## Identification and Improvement of Materiality

As economic and social conditions continue to evolve, we will engage in CSR activities that meet society's expectations by inviting outside experts to regularly verify and update priority areas and activities under the Fundamental CSR Policy. In fiscal 2017, based on the relevant SDGs for each priority area, we identified actions that could contribute to the realization of each goal while promoting PDCA cycles in each priority activity.

### Contributions to Society ▶ p. 10

Relevant SDGs



#### Priority Activities

- Innovation that supports a networked society
- Ensure stable and reliable services as mission-critical infrastructure
- Robust network security for customers
- Continuous improvement in customer satisfaction
- Collaboration with suppliers
- Social contribution and fostering of communities

### Respect for Human Resources ▶ p. 14

Relevant SDGs



#### Priority Activities

- Human resources development
- Respect for diversity, equal opportunity and other objectives
- Maintaining and improving employee health

### Contributions to the Global Environment ▶ p. 12

Relevant SDGs



#### Priority Activities

- Realizing a low-carbon future
- Implementing closed-loop recycling
- Planning a future of natural harmony

### Continuous Strengthening of Corporate Governance ▶ p. 16

Relevant SDGs



#### Priority Activities

- Compliance
- Respect for human rights
- Risk management
- Information security



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

**Our Business and Sustainability**

Our Business Extends Across Society  
Our Goals for Society  
Identification and Improvement of Materiality  
**Directors' Commitment**

Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

## Directors' Commitment

Continuous Strengthening of Corporate Governance

### Building a Management Foundation for an ICT Company Responsible for Critical Infrastructure

As a leading global ICT company, one responsible for key social infrastructure, the NTT Communications Group believes that it must build a management foundation that people can trust in the areas of compliance, respect for human rights, risk management, and information management.

We aim to become a model enterprise in practicing corporate ethics, such as by complying with laws, social norms, and Company rules. Furthermore, as awareness of respect for human rights grows around the world, we are pursuing initiatives to promote human rights and eliminate complicity in violations across the Group.

Also essential is maintaining a robust governance system that can offer a speedy response to business risks and pandemics as well as natural disasters caused by climate change. Moreover, another reality is that society suffers from a lot of crimes related to information security, while we continue to strengthen security management and develop security experts.

Building our management foundation is synonymous with building a foundation for society, and we are fully aware of the heavy responsibility involved. We are committed to consistently fulfilling our responsibilities as a company that is indispensable to society and will continue accomplishing the SDGs.



Toru Maruoka  
Senior Executive Vice President



Contributions to the Global Environment

### Using ICT to Hand Over a Future that is in Harmony with the Global Environment

The NTT Communications Group supports the SDGs upheld by the United Nations as global priority issues, and we are aware of the expectations placed on ICT companies in promoting global environmental activities. We consider lowering the carbon footprint of our corporate Group and the carbon footprint of our products and services to be the twin wheels of our drive to protect the global environment, and we have established the Environmental Statement and Eco Strategy 2030 as our vision of an ideal future, as we continuously engage in multifaceted activities based on our unique environmental management system.

For example, at our data centers and telecommunications buildings, we are seeking to improve the efficiency of air-conditioning by applying ICT to visualize temperatures and electricity usage, in addition to upgrading older equipment. We are also thoroughly committed to the 3Rs (reduce, reuse, and recycle) with regard to all resources involved in our business activities. The know-how we have accumulated through our initiatives will be shared with those outside the Group in an effort to help lower the carbon footprint of society as a whole.

We will hand over the earth's limited resources to the next generation as an eco-friendly company that contributes to ensuring a rich global environment.



Masaaki Moribayashi  
Senior Executive Vice President



Respect for Human Resources

### Realizing Workplaces that Enable Diverse Human Resources to Thrive

A workplace, where employees with various backgrounds and personalities can show mutual respect, allows them to engage in a contest of values and gives rise to synergies, vital for meeting the ever-diversifying needs of customers. Committed action from companies is something that the NTT Communications Group recognizes as a requirement to realize a society that thrives on diversity. We have thus been implementing a Diversity & Inclusion strategy designed to develop human resources for businesses undergoing rapid globalization.

Against the background of falling birthrates and an aging population, we have been developing multifaceted systems that promote women's careers and creating environments that allow for greater diversity in workstyles. Also, we have sought to offer opportunities to personnel regardless of race, nationality, background and age, with the aim of keeping our employees highly motivated. We think these activities contribute to achieving the SDGs. Additionally, we will accelerate the pace of workstyle reforms because we believe that ensuring a good work-life balance is essential to continuing work that is humane and rewarding.

We hope to contribute to the development of a prosperous society as an organization in which everyone can fully demonstrate their abilities by acknowledging and lifting each other higher.



Denji Sakurai  
Executive Vice President



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 **Our Business and Sustainability**

Our Business Extends Across Society  
Our Goals for Society  
Identification and Improvement of Materiality  
**Directors' Commitment**

 **Contributions to Society**

 **Contributions to the Global Environment**

 **Respect for Human Resources**

 **Continuous Strengthening of Corporate Governance**

CSR Activity Results

Corporate Data



## Contributions to Society

### Harnessing the Power of Innovation for a Sustainable Society

Innovations based on ICT always carry possibilities that could cause a sea change in our daily lives and business. At the same time, as ICT grows in significance and presence as a social infrastructure, ensuring high stability and reliability for ICT has become even more important than generating innovations.

The NTT Communications Group will strive to meet global expectations by building robust ICT infrastructure and expanding global services based on cloud technology while also developing services that help resolve a broad range of social issues. Our goal is to apply ICT to bring about a society with always secure and fast networks that enable everyone to connect with each other, unrestricted by time, distance, or language. ICT networks are a crucial infrastructure for today's society, and any interruptions can pose immeasurable risks for economic activity. Eliminating the digital divide, which creates a gap in access to information between people who can use ICT and people who cannot, is also an important social issue.

We will not only seek to accomplish the SDGs, which are international goals to be attained by 2030, but will also continue to pursue activities that help create a better future through innovations based on ICT in order to contribute to the development of the sustainable society that lies beyond.



**Hiromasa Takaoka**  
Senior Vice President, Head of Customer Services

Relevant  
SDGs



### Rising to the Groupwide Challenge to Realize a Sustainable Society



**Eiichi Tanaka**  
Executive Vice President



The UN SDGs are common goals that need to be addressed by the entire world to bring about a better future, and public interest in them has grown steadily across countries and organizations.

The Fundamental CSR Policy of the NTT Communications Group consists of four priority areas: society, the environment, human resources, and corporate governance, the last of which lies at the foundation of the first three. We are exploring initiatives linked with SDGs in each area, and some have already yielded results. Specifically, we are seeking to address social issues such as the labor shortage and rising pace of climate change by developing solutions that harness the advanced technologies such as IoT and AI that represent our strengths as an ICT company in order to secure human resources. We are also seeking the global deployment of data centers that thoroughly minimize carbon footprints.

The SDGs have a major significance for corporate CSR activities. While it is important to practice CSR based on unique corporate characteristics, doing so would lose meaning if the means become the purpose. As we act with universal issues and global interests in mind, it is the steadfast effort that goes into resolving global social issues and creating values that ultimately results in CSR activities based on a global perspective.

By sharing these activities and values across all Group companies and by having each individual member of the Group take the initiative of action, we believe that we can realize a safe, comfortable, and prosperous society. As a partner that connects the present with the future, the NTT Communications Group will take on the challenges of making a better, sustainable society in a united Groupwide effort.

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 **Contributions to Society**

Contributions to Society  
Our Actions

 Contributions to the Global Environment

 Respect for Human Resources

 Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data



Society

## Contributions to Society

# Helping More People around the World Connect Seamlessly with ICT in Their Daily Lives

## Our Ambition

A society where everyone is connected through ICT

- ◆ A society unrestricted by time, distance or language
- ◆ A society with always secure and fast networks

Targeted  
SDGs



## Our Approach

- ✓ Innovation that supports a networked society
- ✓ Ensure stable and reliable services as mission-critical infrastructure
- ✓ Social contribution activities

New ICT is being created every day, and the paradigm of economic activity is constantly shifting. As a leading global ICT company, the NTT Communications Group seeks not only to produce highly dependable, high-quality communications infrastructure in its daily operations, but it is also focused on helping solve social issues by providing society and its customers with cutting-edge technologies. Moreover, we are constantly exploring ways to apply ICT for the benefit of society. By taking a multi-faceted approach in our core initiatives, we aim to help create a better future while prospering in unison with various communities throughout society.

## Priority Activities

- ◆ Innovation that supports a networked society
- ◆ Ensure stable and reliable services as mission-critical infrastructure
- ◆ Robust network security for customers
- ◆ Continuous improvement in customer satisfaction
- ◆ Collaboration with suppliers
- ◆ Social contribution and fostering of communities

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

**Contributions to Society**

Contributions to Society

**Our Actions**

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

## Our Actions



# We solve social issues by applying cloud-based IoT to protect workers and businesses.

Social and economic environments are changing rapidly, continuously raising expectations for contributions that could be made through ICT. We have therefore taken on the challenge of realizing a sustainable society as an innovative corporate group.

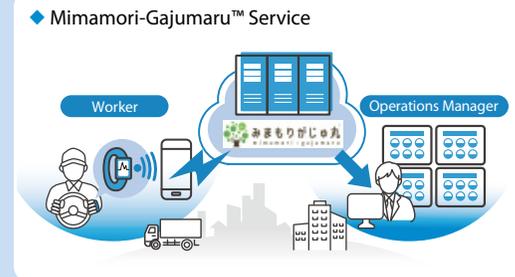


### Reducing the Risks of Labor Issues with the Power of IoT

As Japanese society experiences a declining birthrate and aging population, securing labor has become a major issue for companies. The labor shortage is most conspicuous in worksites of industries such as transport, construction, manufacturing, and security. While companies face demands for workstyle reform, the health and safety of workers are actually being threatened, thereby raising the risk of accidents. Over the years, we have been conducting verification tests using advanced technologies such as AI and IoT to develop new services. One example is Mimamori-Gajumaru™, which was launched in August 2017 as an IoT service aimed at monitoring staff safety and health at various worksites.

### Keeping Workers Safe and Healthy by Visualizing their Current Condition and Unusual Signs

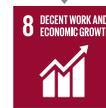
Mimamori-Gajumaru™ is a wristband-type vital sensor that delivers real-time information on the heartrate and location of onsite staff to managers. Grasping the status of overwork and thermal stress tendencies at each worksite can alert managers to the risk of accidents caused by health reasons. Since it is continuously used on a daily basis, it is also possible to detect any unusual signs in a worker's condition. For example, a truck driver wearing the device showed an increased heartrate every time the truck passed a certain point, which helped identify a section of the route that was dangerous for drivers to navigate. The wristband-type sensor has been applied to broader uses that include managing the health of elderly persons and preventing heatstroke. Thus IoT contributes to people's daily lives by providing security and safety.



## NTT Communications' Actions toward the SDGs

The NTT Communications Group contributes to achieving the SDGs by making extensive use of ICT to provide innovative services while continuously taking on challenges with a firm eye on what lies ahead.

### Contributing to SDGs by Utilizing IoT and Cloud Technology



**9**

IoT has made it possible to collect data that could not be gathered in the past. By using the cloud, which enables storing and analyzing vast amounts of data without using our own server, we can generate new services, products, and ideas for using goods.

**8**

Mimamori-Gajumaru™ provides a visualized grasp of the health conditions of workers onsite, thereby leading to the establishment of workplace environments that maintain physical and mental health and support the health management of companies. Companies and employees will both benefit from the prevention of health-related accidents.

**11**

IoT contributes to ensuring comfort, safety, and security in urban development. Connecting homes and offices to the Internet enables the development of towns that are resilient against disasters, highly secure, and use energy effectively.

**4**

IoT and cloud technology are also being applied to education. Once we realize IoT education, it will be possible to receive quality education without being affected by personal environments or circumstances.



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global Environment

Contributions to the Global Environment  
Our Actions

 Respect for Human Resources

 Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Corporate Data



Environment

## Contributions to the Global Environment

# A Sustainable Green Future with Abundance

### Our Ambition

A society in harmony with nature, preserving the planet's abundance

- ◆ A low-carbon society with a light environmental footprint that thoroughly recycles resources
- ◆ A society that respects biodiversity and protects abundant natural resources

Targeted  
SDGs



### Our Approach

- ✓ Realizing a low-carbon future
- ✓ Implementing closed-loop recycling
- ✓ Planning a future of natural harmony

The reduction of CO<sub>2</sub> emissions has been hailed as a necessary means of addressing abnormal weather patterns around the world and to combat global warming. However, not enough has been done. With a pressing need to do more, the NTT Communications Group is moving proactively to deploy low-carbon technologies as a provider of services that utilize ICT equipment. In order to leave future generations an abundant global environment, such as by promoting a closed-loop economy and by coexisting with nature, NTT Communications is also aggressively implementing a multitude of initiatives while fulfilling its responsibilities as a leading global ICT company.

### Priority Activities

- ◆ Realizing a low-carbon future
- ◆ Implementing closed-loop recycling
- ◆ Planning a future of natural harmony

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Contributions to Society

**Contributions to the Global Environment**

Contributions to the Global Environment  
**Our Actions**

Respect for Human Resources

Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Corporate Data

## Our Actions



# We strive to create a low-carbon society and pass on a thriving global environment to the next generation.

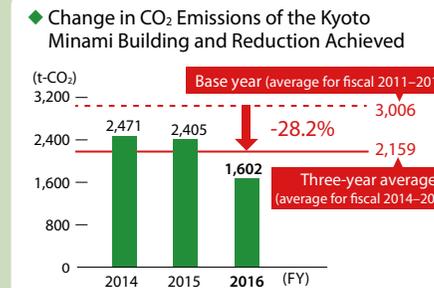
Today ICT business operators are required to develop services that contribute to a low-carbon society as well as to make efforts to reduce the company's carbon footprint. We are promoting environmentally conscious business activities by proactively implementing fundamental measures and adopting cutting-edge technologies.

## What ICT Operators Must Do to Address Social Challenges

Power consumption at telecommunications buildings and data centers continues to rise, affected by the drastic increase of data traffic accompanying the progress of an ICT society. Reducing the company's carbon footprint is an important management challenge for ICT operators, and NTT Communications is addressing this by introducing advanced facilities and technologies across the Group. Specifically, in order to reduce CO<sub>2</sub> emissions from telecommunications buildings, we have improved the airflow in the server room for more effective cooling, adopted a floor panel that accumulates less heat, and set up a board or screen to change the direction of the airflow. In addition, we are pushing ahead with furthering the effective consumption of electricity through the visualization of air-conditioning effectiveness of the entire building as well as by installing SmartDASH®, an advanced integrated air-conditioning control system. Furthermore, in our offices we have introduced LED lighting and lighting equipment with occupancy sensors to reduce electricity use, along with energy saving initiatives that include room temperature control, adjusting computer power settings, and regularly cleaning air-conditioner filters.

## Continuous Initiatives Recognized by Society

These measures have resulted in an average annual decrease of CO<sub>2</sub> emissions of 28.2%, from the operations of telecommunications buildings and the Kyoto Minami Building, for fiscal 2014 to fiscal 2016, compared to the base year (average for fiscal 2011 to fiscal 2013), and we were recognized by Kyoto City as an especially excellent operator. In 2018, the Tokai and Kyushu branches were accredited as Eco Business Establishments for their environmentally sound initiatives. We will proactively continue to reduce the Group's carbon footprint, conducive to the sustainable global environment.



Local governments that have given awards to NTT Communications: Sapporo City, Yokohama City, Nagoya City, Kyoto City, Fukuoka Prefecture, Kagoshima Prefecture

## NTT Communications' Actions toward the SDGs

The NTT Communications Group contributes to achieving the SDGs by making extensive use of ICT to provide innovative services while continuously taking on challenges with a firm eye on what lies ahead.

### Contributing to SDGs by Realizing a Low-carbon Society through the Use of ICT



**13** From a global perspective, we will focus on improving the energy efficiency of ICT-related equipment that has a significant impact on the environment and strive to preserve the global environment to pass on a green, healthy planet to the next generation.

**7** We use solar power at telecommunications buildings and data centers in Tokyo. Looking ahead, we will continue to proactively use clean, renewable energies to reduce GHG emissions.

**12** We will achieve a reduction of waste generated from office-related work by thoroughly implementing the 3Rs (reduce, reuse, and recycle) across our business.

**14** We are making an effort to preserve sustainable marine resources by performing environmental assessments prior to laying out a subsea communications cable network and carrying out minesweeping upon construction as well as through our activities to preserve ecosystems such as corals.



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Contributions to Society

Contributions to the Global Environment

**Respect for Human Resources**

**Respect for Human Resources**  
Our Actions

Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Corporate Data



People

## Respect for Human Resources

# A Business where Everyone Is Respected and Can Be Themselves

### Our Ambition

A society where everyone acknowledges and lifts  
each other higher

- ◆ A society where diversity is respected in terms of individuality, attributes and ideology
- ◆ A society where people can use their abilities to the fullest

Targeted  
SDGs



### Our Approach

- ✓ Human resources development
- ✓ Creating workplaces where diversity thrives
- ✓ Maintaining and improving employee health

While carrying out the responsibilities of companies, employees independently aim for their own happiness and development and are partners that grow with those companies. At the NTT Communications Group, we have measures in place to nurture talented employees with a keen awareness of globalization to grow together with our employees. Over the past few years, attention worldwide has focused on diversity in management as more emphasis is placed on supporting the wellbeing of employees and turning diversity into a competitive advantage. As more women join the workforce and new working styles are adopted, NTT Communications is trying out various new measures, including personnel exchanges around the world.

### Priority Activities

- ◆ Human resources development
- ◆ Maintaining and improving employee health
- ◆ Respect for diversity, equal opportunity, and other objectives

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Contributions to Society

Contributions to the Global Environment

**Respect for Human Resources**

Respect for Human Resources

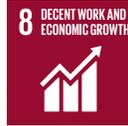
**Our Actions**

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

Our Actions



## We aim to realize diverse workstyles geared to ensuring quality of life.

In order for us to tackle the social issues stemming from a declining birthrate and aging population, we need to create working styles that meet the individual needs of employees. Therefore, we are advancing various reforms toward becoming a leader in terms of work style innovation.



### Continuously Implementing Work Style Reforms in Stages

In 2012, we participated in the Tokyo business model program for work style reforms, which was the catalyst that drove us to make our own such reforms. In the beginning (STEP 1), the focus was on reducing paper usage and reforming our meetings. In 2014, we moved to the next phase (STEP 2) and worked on productivity and working hours reduction by implementing technological solutions to create smart device-enabled environments.

**STEP1**  
(2012–2014)  
Tokyo business model program for work style reforms  
• Promoting paperless offices (distribution of iPads)  
• Meeting reforms

**STEP2**  
(2014–2016)  
Implementation of various system solutions to improve productivity and reduce working hours  
• Promotion of BYOD (Bring Your Own Device)  
• EGG Portal (work operation DIY tool)

**STEP3**  
(from 2017)  
Realization of diverse working styles based on “lifestyle” and “work”  
• Three areas of focus: policies and rules, environment and tools, and awareness and culture

### Working Hours Reduced and Employee Satisfaction Increased with Three Areas of Focus

We are currently on the third phase (STEP 3). Based on our belief that feeling satisfied in a “lifestyle” will also lead to feeling satisfied at “work,” we push forward with our reforms focusing on three areas: 1) policies and rules, 2) environment and tools, and 3) awareness and culture. In 1, we updated our work-from-home policy, which was previously limited to those with childcare and nursing care needs, and made it available to all employees, and made flextime also available to all, to open up new working style options adequate for our diverse workforce. In 2, we established a new IT environment that enhances collaboration and leveraged digitization to promote automation, optimization, and labor-saving in business operations. Here we also facilitated better working hour management by combining our attendance management systems. In 3, we are working on awareness-raising activities with both top-down and bottom-up approaches, such as periodic communication from management and employee-led events. Our ongoing work style reform activities based on these three focus areas have allowed us to achieve a reduction in working hours and raise employee satisfaction. With the aim of becoming the most innovative company for employee work styles, we are accelerating our actions, including the creation of off-site workspaces in karaoke rooms by partnering with other companies. Moreover, our head office will move into a new building in January 2019, with Wi-Fi in all rooms as well as other features, enabling our employees to work more efficiently.

## NTT Communications' Actions toward the SDGs

The NTT Communications Group contributes to achieving the SDGs by making extensive use of ICT to provide innovative services while continuously taking on challenges with a firm eye on what lies ahead.

◆ Contribution to SDGs through Work Style Reforms



**8** The goal of our work style reforms is satisfying each individual “lifestyle” of our employees. The happiness of our employees will lead to the happiness of their families and of people around them. This will, in turn, generate motivation for work.

**5** We are driven to create a work environment that allows our employees to work flexibly and stay with us for a long time over their life events. This contributes to the goal of creating a sustainable society.

**17** We strive to be the leading company of work style reforms through the use of the latest ICT. We challenge ourselves to invent new services and solutions that change how work is done in Japan and push forward with our reforms through collaboration within and outside our organization.

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global  
Environment

 Respect for Human Resources

 Continuous Strengthening of  
Corporate Governance

Continuous Strengthening of  
Corporate Governance  
Our Actions

CSR Activity Results

Corporate Data



## Continuous Strengthening of Corporate Governance

## Always Trusted for Our Sense of Responsibility

### Our Ambition

A society built on coexistence and mutual  
trust between stakeholders and companies

- ◆ A society where corporate actions are closely aligned with laws, regulations, and ethics
- ◆ A society that benefits from corporate activities and daily dialog with stakeholders

Targeted  
SDGs



### Our Approach

- ✓ Efficiency in governance
- ✓ Thorough compliance
- ✓ Ensure information security

As we continue to provide global ICT services that have become embedded in social infrastructure, we must ensure that our management foundation covers all the required elements, which are diverse. They include an efficient and nimble business organization, an open corporate culture, and a risk management system capable of flexibly responding to emergencies such as accidents and natural disasters. At the NTT Communications Group, we take a thorough, Groupwide approach to ensuring efficient governance and solid compliance in order to continue contributing to the development of a sustainable society. In recent years in particular, we have been working diligently to prevent and thwart cybercrime, which has become a serious social problem.

#### Priority Activities

- ◆ Compliance
- ◆ Risk management
- ◆ Respect for human rights
- ◆ Information security

## NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents

 Our Business and Sustainability

 Contributions to Society

 Contributions to the Global  
Environment

 Respect for Human Resources

 **Continuous Strengthening of  
Corporate Governance**

Continuous Strengthening of  
Corporate Governance

**Our Actions**

CSR Activity Results

Corporate Data

### Our Actions

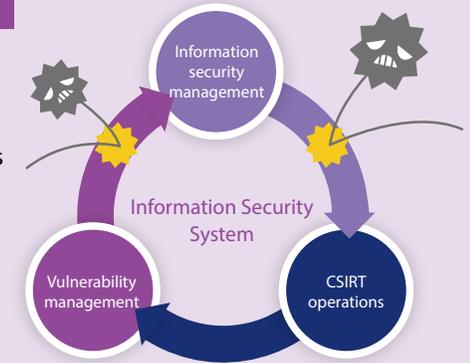


## We strengthen CSIRT operations to reduce the security risks of Companywide IT systems.

Advances in an ICT-based society have raised the threat against cyber security for both individuals and corporations. We are therefore bolstering our countermeasures toward realizing a safe and sustainable social infrastructure.

### Building a CSIRT Operation System for a Quick Response to Incidents

Ensuring information security is the core of our initiatives as an ICT company, and we have repeatedly sought to bolster our countermeasures for the Companywide IT system to address threats against cyber security that continue to grow in sophistication and diversity. The relationship between cyberattacks and security measures is often a vicious cycle, which means that eliminating the threat completely is impossible, no matter how many measures are implemented. We launched an internal Computer Security Incident Response Team (CSIRT) in July 2017 with an emphasis on minimizing the impact and limiting damages in the event of an incident.



### Building a Robust Social Infrastructure by Creating a Self-Detection Mechanism against Cyberattacks

It is often the case that people only realize they are under cyberattack after being warned by someone else, and thus fall one step behind in their response. We therefore believe it is important to create a corporate self-detection mechanism against cyberattacks. For example, an event in the security equipment will trigger a review of server logs and network equipment, visualizing and analyzing them from a security perspective, which in turn leads to early detection and response to a threat. The pressing issue in the years ahead will be to organize incident response operations into standardized management operations and establish a management system with the optimal number of staff. Also, we will actively develop security experts by utilizing CSIRT operations as a field in which we practice and experience operations for security management.

## NTT Communications' Actions toward the SDGs

The NTT Communications Group contributes to achieving the SDGs by making extensive use of ICT to provide innovative services while continuously taking on challenges with a firm eye on what lies ahead.

### ◆ Contributing to the SDGs by Strengthening Information Security



**9** We will contribute to building networks that are safe and secure for everyone by realizing a total security service that defends the overall IT environment against various threats in the ICT-based society that continuously grows in sophistication and diversity.

**11** As a company that provides global ICT services, enhancing our own information security to handle customer information appropriately and safely will lead to preventing and responding to cybercrime, which in turn will contribute to the sustainable growth of society.

**16** Providing robust security technology to ensure safe and secure access to networks from around the world lead to eliminating the digital divide in the international community.

NTT Communications Corporation  
CSR Report 2018

Business Vision and Fundamental CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Fiscal 2017 Targets and Results

Corporate Data

# Fiscal 2017 Targets and Results

## Contributions to Society

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Innovation That Supports a Networked Society	Provision of new value that contributes to business transformation	Contribute to the digital transformation of corporate customers by optimizing their hybrid ICT environments	<ul style="list-style-type: none"> <li>Released the "Things Cloud" IoT Platform with functions required for adopting IoT, such as sensor connections, data visualization, and API</li> <li>Promoted the "service + solution" model to offer speedy service proposals based on the "Things Cloud" and provide value-added solutions that meet customer needs</li> </ul>	<ul style="list-style-type: none"> <li>Number of IoT projects generated by "Things Cloud": more than 80</li> <li>Number of press releases related to IoT: 10</li> <li>Number of new IoT reference users and ecosystems: several companies</li> </ul>	★★★
	Realization of safe and secure daily lifestyles; bridging the digital divide	Launch new services for improving OCN services and continuously implement functional enhancements	<ul style="list-style-type: none"> <li>Strengthen OCN Mobile ONE service functions by gathering information mainly via social media to identify market trends and needs</li> <li>Leveraged the link with NTT DOCOMO's customer system to quickly connect SIM cards in MVNO and significantly reduce time wasted on the commencement of the OCN Mobile ONE service</li> <li>Improved communication speeds and time taken to display content for OCN Mobile ONE during heavy data traffic</li> <li>Initiatives for enhancing communication quality for OCN</li> <li>Improved communication speeds for OCN Mobile ONE during heavy data traffic</li> </ul>	4 projects	★★★
Ensuring Stable and Reliable Services as Mission-Critical Infrastructure	Development of disaster-resilient networks	<ul style="list-style-type: none"> <li>Explore measures against flooding based on the latest hazard maps (flood prevention: Shirahige and Karagasaki; seismic reinforcement: Tenjinminami)</li> <li>Improve the reliability of power receiving equipment and engines (complete upgrades for power receiving equipment at 4 buildings)</li> <li>Improve seismic performance by reinforcing the linings of pipelines (complete remaining stages in Kawasaki and Nara)</li> <li>Submarine cable APG</li> <li>Improve the reliability of landing stations and strengthen building security measures for the Minami Boso Landing Station</li> </ul>	<ul style="list-style-type: none"> <li>Flood prevention and seismic reinforcement</li> <li>Flood prevention: began construction at Karagasaki (to be completed in March 2019); considered plans for Shirahige (to be decided in April 2018); considered plans for Sakae and Nagoya (to be decided in April 2018)</li> <li>Seismic reinforcement: considered plans for Tenjinminami (construction to start in 1Q 2018)</li> <li>Improved seismic performance by reinforcing the linings of pipelines (remaining stages in Kawasaki and Nara)</li> <li>Improved the reliability of submarine cables                             <ul style="list-style-type: none"> <li>Construction of the JUPITER cable (to be completed in FY2020)</li> <li>Separation of the ASE-Indonesia cable (completed in FY2019)</li> </ul> </li> <li>Improved the reliability of landing stations                             <ul style="list-style-type: none"> <li>Began construction at the Minami Boso Landing Station (to be completed in June 2019)</li> <li>Strengthened building security (face recognition trial in FY2018)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Upgraded power receiving equipment and engines                             <ul style="list-style-type: none"> <li>FY2017: completed power receiving equipment at 4 buildings</li> <li>FY2018: upgraded power receiving equipment at 17 buildings; plans for 6 engines</li> </ul> </li> <li>Off-site maintenance                             <ul style="list-style-type: none"> <li>FY2020 maintenance ratio for bridge-attached pipelines and manholes: 100%</li> </ul> </li> <li>Improved seismic performance by reinforcing the linings of pipelines                             <ul style="list-style-type: none"> <li>Completed work in Kawasaki and Nara in 2017</li> </ul> </li> </ul>	★★★
	Measures to address major natural disasters	<ul style="list-style-type: none"> <li>Reconfirm basic action/processes in the event of an earthquake directly under the Tokyo metropolitan area and take measures to reconfirm employee and emergency personnel familiarity with NTT Communications disaster equipment</li> <li>Rush drill that assumes an earthquake has struck directly under the Tokyo metropolitan area at night on a Saturday or national holiday, first initial response drill involving west Japan initial response headquarters</li> <li>Gather disaster information for personnel at west Japan initial response headquarters and entrench implementation of external report processes</li> <li>Opening of NTT Communications support bases for domestic Group companies</li> </ul>	<ul style="list-style-type: none"> <li>April 2017: conducted field training at the Tokyo Rinkai Disaster Prevention Park, involving transport helicopters and mobile power stations for the purpose of mastering the use of NTT Communication's disaster equipment</li> <li>March 2018: conducted a desk training session through e-learning for all employees concerning basic actions to be taken in the event of an earthquake directly under Tokyo</li> <li>February 2018: conducted training for disaster response members to confirm basic actions to be taken in the event of an earthquake directly under Tokyo; members traveled from their homes to their offices on the assumption that an earthquake had occurred on a weekend or holiday. We also conducted field training simulating the establishment of the west Japan initial response centers to handover of command to the Disaster Response Headquarters.</li> </ul>	<ul style="list-style-type: none"> <li>Participant survey response confirms drills and training were effective</li> <li>While no major disasters occurred during FY2017, we were able to establish processes for gathering information and reporting to entities outside the company in the event of major malfunctions</li> </ul>	★★★
Robust Network Security for Customers	Network surveillance 24 hours a day, 365 days a year	<ul style="list-style-type: none"> <li>Reduction in the number of long-term malfunctions</li> <li>Networks in Japan (more than 3 hours): 86 incidents/year</li> <li>Overseas networks (more than 4 hours): 460 incidents/year</li> <li>Other (CL, A&amp;C, and voice, more than 1 hour): 48 cases/year</li> <li>Regarding overseas networks, continue holding improvement GOC and individual event meetings as well as quality improvement meetings with carriers</li> <li>In other services, undertake measures to reduce malfunctions that include revamping monitoring/testing tools to address increases in equipment size and malfunctions accompanying the rise in the number of customers</li> </ul>	<ul style="list-style-type: none"> <li>Maintained constant monitoring of customer services</li> <li>With regard to domestic networks, we will continue to provide stable quality</li> <li>With regard to overseas networks, we maintained weekly teleconferences with GOC/SA on individual improvements for UNO incidents caused by NTT Communications/Virtela and sought to raise awareness on quality enhancement at Virtela.</li> <li>With regard to malfunctions caused by carriers, we analyzed specific cases among carriers with high ratios of long-term malfunctions per line, in conjunction with carrier strategies for each country, provided feedback on analysis results to the carriers, and promoted improvements utilizing QRM and ACF.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in the number of long-term malfunctions                             <ul style="list-style-type: none"> <li>Networks in Japan (more than 3 hours): 71 incidents/year</li> <li>Overseas networks (more than 4 hours): 556 incidents/year</li> <li>Other (CL, A&amp;C, and voice, more than 1 hour): 64 incidents/year</li> </ul> </li> </ul>	★★

# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental CSR Policy

Senior Management's Commitment

Contents

Our Business and Sustainability

Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

## CSR Activity Results

### Fiscal 2017 Targets and Results

Corporate Data

## CSR Activity Results | Fiscal 2017 Targets and Results

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Robust Network Security for Customers	Strengthening vulnerability response functions	Improve the quality of vulnerability assessment operations for Web apps and quickly fix any vulnerabilities that are discovered	<ul style="list-style-type: none"> <li>Internal staff conducted vulnerability tests for Web apps</li> <li>Encouraged employees to deepen their knowledge of security by organizing security-themed training and events such as CTF</li> <li>Strengthened our software development capability by internally constructing a storage system for assessment records</li> <li>Incorporated know-how on security gained from vulnerability assessments into rules and guidelines</li> <li>Raised the standard of vulnerability assessments conducted before service releases</li> </ul>	<ul style="list-style-type: none"> <li>Completed the assessment of 128 systems planned for FY2017</li> <li>Source code revisions: 14</li> <li>Completed the development of a management system for assessment records</li> </ul>	★★★
	Rapid and reliable responses to security threats	<ul style="list-style-type: none"> <li>Expand the scope and upgrade professional services that support the strengthening of risk management with regard to security measures</li> <li>Upgrade managed security services that visualize as well as support the rapid and accurate handling of security threats</li> <li>Upgrade security measures related to SDx and IoT</li> </ul>	<ul style="list-style-type: none"> <li>Sought to expand the scope and upgrade professional services through efforts that include the launch of an advisory support service acting as an agent to conduct research on ICT and security issues to enable CSIRT response at corporate customers to in-house inquiries</li> <li>Sought to upgrade managed security services through efforts that include the launch of the "Active Blacklist Threat Intelligence" service, which creates a black list of current cyberattacks in Japan and delivers the information every 10 minutes to enable users to strengthen their defenses by preventing access to malicious sites</li> <li>Conducted a PoC trial for monitoring the security of operational technology as part of the security upgrades for SDx and IoT</li> </ul>	New services provided: 10	★★★
Continuous Improvement in Customer Satisfaction	Ongoing CS surveys	<ul style="list-style-type: none"> <li>Expand the scope of the customer survey (inside and outside Japan)</li> <li>Thoroughly implement "Kaizen (Improvement) Activities" and PDCA cycles at domestic and overseas Group companies</li> </ul>	<ul style="list-style-type: none"> <li>Launched the VOE (Voice of Employees) system</li> <li>Held a Group-wide meeting to confirm commitment to expanding the scope of services and companies covered by the survey, and the next steps of "Kaizen Activities"</li> </ul>	<ul style="list-style-type: none"> <li>Survey responses</li> <li>- Domestic: 2,641 (up 97% on the year)</li> <li>- Overseas: 113 (up 181% on the year)</li> <li>- VOE: 227</li> </ul>	★★★
Collaboration with Suppliers	Dissemination of CSR and green procurement	Continue to conduct the annual supplier survey on promoting CSR procurement	Conducted the annual supplier survey on promoting CSR procurement	Survey conducted for 10 companies	★★★
Social Contribution and Fostering of Communities	Contributions to communities	<ul style="list-style-type: none"> <li>Continue local cleanup activities and introduce cleanups by individual Group companies</li> <li>Continue holding sales events for breads, snacks, and other goods, in cooperation with local organizations supporting people with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>Conducted a cleanup activity around the head office; local cleanup activities were also conducted individually at other business bases and Group companies</li> <li>Held sales events at the head office building as well as at other facilities and individual Group companies</li> </ul>	<ul style="list-style-type: none"> <li>Head office area cleanup activities: held twice (June and November); 513 participants</li> <li>Head office sales events: held 4 times (July, November, February, and March); gross sales of 395,430 yen</li> </ul>	★★★
	Fostering communities and the next generation	Continue promoting initiatives for the sound development of children by providing social education opportunities such as workplace visits that offer firsthand experience of the latest AI and IoT technology, and by organizing rugby classes by our sponsored rugby team	<ul style="list-style-type: none"> <li>Held family days and conducted woodland preservation activities</li> <li>Teamed up with the educational boards and other municipal organizations of Ichikawa, Urayasu, and Warabi Cities to organize rugby classes at elementary schools in each area; both current and past players actively participated in tag rugby classes</li> </ul>	<ul style="list-style-type: none"> <li>Family day: held 3 times in August; 71 children participated</li> <li>Woodland preservation activity: 7 children participated</li> <li>Rugby classes: held at 15 schools, about 1,500 children participated</li> </ul>	★★★

## Contributions to the Global Environment

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Realizing a Low Carbon Future	Cutting carbon emissions from businesses	<ul style="list-style-type: none"> <li>Raise power efficiency per data transmission in our telecommunications businesses (including data centers) by at least 10 times in 2030 compared to fiscal 2013 levels (fiscal 2017 target was 2.8-fold)</li> <li>Ongoing implementation of, for example, adjustment of telecommunications equipment intake/exhaust direction, improvement of airflow, optimization of indoor temperature, air-conditioning control by humidity sensors, switching off of unnecessary power usage</li> <li>CO<sub>2</sub> emission amount: 252,000 t-CO<sub>2</sub></li> <li>- In telecommunications and data center: 235,000 t-CO<sub>2</sub></li> <li>- In office buildings: 17,000 t-CO<sub>2</sub></li> </ul>	<ul style="list-style-type: none"> <li>Adjustment of telecommunications facility intake/exhaust directions, improvement of airflow, optimization of indoor temperature, and air-conditioning control by humidity sensors</li> <li>Switching off of unnecessary power usage</li> </ul>	<ul style="list-style-type: none"> <li>Increase in power efficiency: 3.4-fold</li> <li>CO<sub>2</sub> emission amount: 257,000 t-CO<sub>2</sub> (+ 5,000 t)</li> <li>- In telecommunications and data centers: 240,000 t-CO<sub>2</sub> (+ 5,000 t)</li> <li>- In office buildings: 17,000 t-CO<sub>2</sub> (on par)</li> </ul>	★★★

Achievement levels (self-assessment set at three levels) ★★★: Target achieved, ★★: Target almost achieved, ★: Target only partially achieved



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents



Our Business and Sustainability



Contributions to Society



Contributions to the Global  
Environment



Respect for Human Resources



Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Fiscal 2017 Targets and Results

Corporate Data

## CSR Activity Results | Fiscal 2017 Targets and Results

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Realizing a Low Carbon Future	Cutting society's carbon emissions through products and services	Expand the use of the Environmental Solutions Label System to contribute to reducing CO <sub>2</sub> emissions across society by at least 10 times more than the NTT Com Group's own emissions in 2030 (fiscal 2017 target was 17.2-fold)	Maintain and promote the sales of Environmental Solutions Label certified services capable of contributing to the reduction of CO <sub>2</sub> in society	Contribution to CO <sub>2</sub> reduction in society/the Company's own emission: 19.8-fold	★★★
Implementing Closed-Loop Recycling	Realization of a low environmental impact business model	Building and maintenance of a low environmental impact business model - Implementation of measures to reduce electricity use - Installation of energy-saving equipment - Appropriate management of hazardous substances	<ul style="list-style-type: none"> <li>Nationwide deployment of airflow control</li> <li>Installation of energy-saving equipment</li> <li>Appropriate management of PCB/asbestos hazardous substances</li> </ul>	—	★★★
	Thorough implementation of a 3R policy in businesses	<ul style="list-style-type: none"> <li>Thorough implementation of a 3R policy—reduce, reuse and recycle—with regard to all the resources relevant to our business activities</li> <li>Improvement in final waste disposal ratio: final disposal ratio of 2.4% or lower</li> <li>Strengthen measures at the level of individual organizations based on data on multifunction printer usage, and promote a paperless working style that utilizes ICT equipment</li> </ul>	<ul style="list-style-type: none"> <li>Enhance promotion of 3R policy</li> <li>Confirm waste process flow and method, promote thermal recycling to improve final disposal ratio</li> <li>Promote paperless working style based on data on multifunction printer usage</li> </ul>	Final disposal ratio: 0.85%	★★★
Planning a Future of Natural Harmony	Facilities that show consideration for biodiversity	<ul style="list-style-type: none"> <li>Facility construction, maintenance, and repair based on NTT Group building concepts</li> <li>Compliance with action guidelines with regard to biodiversity conservation</li> </ul>	<ul style="list-style-type: none"> <li>Facility maintenance based on NTT Group building concepts</li> <li>Compliance with action guidelines with regard to biodiversity conservation</li> </ul>	—	★★★
	Utilize ICT to contribute to biodiversity	Utilize ICT to contribute/respond to biodiversity	<ul style="list-style-type: none"> <li>Coral reef conservation activities through business activities at NTT Plala</li> <li>Expansion of Mimawari Rakutaro</li> <li>Information dissemination and educational activities through goo Green Label</li> </ul>	—	★★★

## Respect for Human Resources

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Human Resource Development	Maintenance and improvement of motivation	<ul style="list-style-type: none"> <li>Implement measures to continuously maintain and improve employee motivation through surveys to all employees</li> <li>Expand implementation of employee awareness surveys across the Group companies</li> </ul>	<ul style="list-style-type: none"> <li>Continuously maintained and improved employee motivation based on employee satisfaction surveys</li> <li>Conducted trial employee satisfaction surveys in overseas Group companies</li> </ul>	<ul style="list-style-type: none"> <li>The employee satisfaction survey results indicated improvement (positive response ratio: 59.8%, +1.1 points above the previous year)</li> <li>Recognized as the best large corporation to work in 2018 by Great Place To Work®</li> </ul>	★★★
	Building a career development program	Training time per person: more than 19 hours	In data science and intellectual property, the specialty fields (subcategories) that were newly added in 2016, Milestone Level 3, was achieved for the first time; executed activities for raising skill levels Companywide and increasing the number of talented employees capable of major contributions, such as setting up new communities and organizing workshops by top engineers in the industry	Training time per person: 21 hours	★★★
Respect for Diversity and Equal Opportunities	Employment and promotion of diverse human resources	Continue department level and domestic Group company level activities that involve discussions with female managers to influence and improve employee career-mindedness	Held the "Open Cafe" event for first-year employees, including a panel discussion on female manager career paths; also organized discussion sessions for female managerial candidates with current female managers (manager of HR, manager of the Diversity Promotion Office), and both of these activities were intended to raise career-mindedness of female employees	<ul style="list-style-type: none"> <li>Received "Platinum Kurumin" certification based on the Act on Advancement of Measures to Support Raising Next-Generation Children</li> <li>On a non-consolidated basis, NTT Communications' ratio of employees with disabilities in 2017 was 2.2% (as of June 1). The Company expects to receive compensation from the national government for hiring of people with disabilities, for the third consecutive year.</li> </ul>	★★★
	Training global personnel	Promote seconding employees to new companies and also accepting such employees; plan to send 50 seconding employees and accept 20	As destinations for secondment, create more posts that lead to greater software development skills and technical capabilities, which will be critical to business going forward. In addition, take in a greater number of human resources (six out of 22 people) from acquired companies, not only from locally established affiliates.	There were 52 seconded employees. The Company has taken in 22 employees.	★★★

Achievement levels (self-assessment set at three levels) ★★★: Target achieved, ★★: Target almost achieved, ★: Target only partially achieved



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents



Our Business and Sustainability



Contributions to Society



Contributions to the Global  
Environment



Respect for Human Resources



Continuous Strengthening of  
Corporate Governance

CSR Activity Results

Fiscal 2017 Targets and Results

Corporate Data

## CSR Activity Results | Fiscal 2017 Targets and Results

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Maintaining and Improving Employee Health	Respect for work-life balance	<ul style="list-style-type: none"> <li>Accelerating working style reform</li> <li>Promotion of not working after 20:00 for all employees (late night work is in general not permitted)</li> <li>Designating months for leaving work at regular times (August, November)</li> <li>Promotion of remote working (expand working from home to all employees, provide a secure work space)</li> <li>Consider and implement systems for flex/shift working/modified working styles</li> <li>Management level reforms (work inventory, clearance of unnecessary tasks)</li> </ul>	<ul style="list-style-type: none"> <li>Accelerated working style reform</li> <li>Promoted "not working after 20:00" for all employees (late night work is in general not permitted)</li> <li>Designated months for leaving work at regular times (August, November)</li> <li>Promoted remote working (e-work (working from home) for all employees, provided a secure work space)</li> <li>Implemented flextime for all Group companies</li> <li>Conducted management level reforms (work inventory, clearance of unnecessary tasks)</li> </ul>	<ul style="list-style-type: none"> <li>Annual total work time (1,895 h, -14 h), overtime (246 h, -22 h), both reduced from the previous year</li> <li>95% of employees responded "want to continue using flextime system"</li> <li>The results of the employee satisfaction survey showed an increase in positive responses to "the company is fully committed to realizing a highly productive work style" (ratio of positive responses: 68.2%, +5.2 points above the previous year)</li> </ul>	★★★
	Thorough implementation of occupational safety and health	Health checkup rate 100%	Various groups to work together and recommend checkups for those who have not yet received them	99.8%	★★

## Continuous strengthening of management foundation

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Compliance	Raise awareness and establish compliance throughout the Group	<ul style="list-style-type: none"> <li>Deliver executive messages on corporate ethics from members of top management to all employees</li> <li>Issue an e-magazine on compliance for all employees</li> <li>Conduct job level-based training sessions, including compliance seminars for senior executives, compliance training for all full-time and temporary employees, new employee training, and other rank-based training</li> <li>Enhance corporate ethics training materials for NTT Communications Group companies</li> </ul>	<ul style="list-style-type: none"> <li>Delivered an executive message on corporate ethics from the president</li> <li>Issued an e-magazine on compliance for all employees</li> <li>Conducted job level-based training sessions, including compliance seminars for senior executives, compliance training for all full-time and temporary employees, new employee training, and other rank-based training</li> <li>Created training materials for overseas Group companies</li> </ul>	—	★★★
	Appropriate prevention and response to violations and misconduct	<ul style="list-style-type: none"> <li>Maintain and operate various contact points to provide an appropriate and adequate response to consultations and report on diverse issues, and support consultations in languages other than Japanese</li> <li>- NTT Group Corporate Ethics Help Line set up at a law firm</li> <li>- NTT Communications Compliance Hotline</li> <li>- Compliance Hotline set up at NTT Communications Group companies</li> <li>- Workplace Problem Consultation Helpdesk that receives consultations on work-related issues</li> <li>- Human Rights Consultation Helpdesk</li> <li>Conduct training for staff in charge of promoting compliance</li> <li>Strengthen auditing to facilitate the discovery and prevention of illegal activity</li> </ul>	<ul style="list-style-type: none"> <li>Maintained and operated various contact points to provide an appropriate and adequate response to consultations and report on diverse issues, and supported consultations in languages other than Japanese</li> <li>- NTT Group Corporate Ethics Help Line set up at a law firm</li> <li>- NTT Communications Compliance Hotline</li> <li>- Compliance Hotline set up at NTT Communications Group companies</li> <li>- Workplace Problem Consultation Helpdesk that receives consultations on work-related issues</li> <li>- Human Rights Consultation Helpdesk</li> <li>Conducted training for staff in charge of promoting compliance</li> <li>Strengthen auditing to facilitate the discovery and prevention of illegal activity</li> </ul>	—	★★★
Respect for Human Rights	Raise awareness and establish respect for human rights throughout the Group	Strengthen efforts for developing a Groupwide framework for promoting human rights awareness, including identifying human rights issues at overseas Group companies	Conducted potential human rights impact assessment related to overseas Group companies to understand human rights issues and risks in relevant businesses	Assessment conducted for overseas Group companies: 26 companies	★★★
	Appropriate prevention and response to human rights abuses	Continue to operate and disseminate information on contact points that can effectively and sufficiently respond to consultations and report on diverse issues	<ul style="list-style-type: none"> <li>Disseminated a schedule of face-to-face consultations with professional counselors and information on various internal contact points</li> <li>Disseminated information on contact points through Companywide human rights training and the corporate intranet</li> </ul>	<ul style="list-style-type: none"> <li>Notice on availability of contact points: 12 times (monthly)</li> <li>Participation in human rights training: 17,436 employees</li> </ul>	★★★
	Promotion and stringent practice of respect for human rights through contents and services	Protect children's human rights by maintaining access restrictions for "goo," "plala," and "OCN" services based on a list of child pornography website addresses provided by the ICOSA	Protected children's human rights by maintaining access restrictions for "goo," "plala," and "OCN" services based on a list of child pornography website addresses provided by the ICOSA	<ul style="list-style-type: none"> <li>OCN: more than 200 restricted sites</li> <li>goo: 200 child pornography website addresses added to the restricted access list per week</li> </ul>	★★★

Achievement levels (self-assessment set at three levels) ★★★: Target achieved, ★★: Target almost achieved, ★: Target only partially achieved



# NTT Communications Corporation CSR Report 2018

Business Vision and Fundamental  
CSR Policy

Senior Management's Commitment

Contents



Our Business and Sustainability



Contributions to Society



Contributions to the Global  
Environment



Respect for Human Resources



Continuous Strengthening of  
Corporate Governance

## CSR Activity Results

Fiscal 2017 Targets and Results

Corporate Data

Priority Activities	Initiatives	Fiscal 2017 Targets	Fiscal 2017 Activity Results		
			Specific Activities	Quantitative Results	Self-Assessment
Risk Management	Continuous upgrades to risk management structure	<ul style="list-style-type: none"> <li>Business risks               <ul style="list-style-type: none"> <li>Maintain ongoing efforts to develop a business risk management structure by incorporating activities of overseas Group companies into domestic risk management activities</li> </ul> </li> <li>Crisis risks               <ul style="list-style-type: none"> <li>Implement personal safety confirmation measures for overseas employees during the fiscal year to enable response to crisis risks outside Japan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Business risks               <ul style="list-style-type: none"> <li>Implement business risk management activities at 8 overseas subsidiaries in fiscal 2017 as a follow-up to measures implemented at the 5 regional headquarters in 2016</li> </ul> </li> <li>Crisis risks               <ul style="list-style-type: none"> <li>Began operating an overseas personal safety confirmation program for employees on business trips, expats, and senior managers at acquired companies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Business risks               <ul style="list-style-type: none"> <li>Implemented business risk management activities at all 8 overseas subsidiaries</li> </ul> </li> <li>Crisis risks               <ul style="list-style-type: none"> <li>Incorporated data for about 4,000 employees who take business trips each year, expats, and senior managers of 11 acquired companies into the overseas personal safety confirmation program</li> </ul> </li> </ul>	★★★
Information Security	Strengthening of Security Management	<ul style="list-style-type: none"> <li>Strengthen security management through collaboration with domestic Group companies to raise competitiveness</li> <li>Bolster process management to ensure the safe handling of confidential information, including personal information</li> <li>Conduct Companywide security training to raise awareness and limit occurrences of security incidents (attendance: 100%)</li> <li>Improve and strengthen security measures at each Group company based on security survey results</li> <li>Bolster collaboration regarding responses to security incidents, including cyberattacks</li> </ul>	<ul style="list-style-type: none"> <li>Conducted a survey of Group companies (12 in Japan, 25 overseas) to confirm the implementation of PDCA cycles for security management</li> <li>Introduced application rules for seeking special access to integrated networks to ensure greater safety in the handling of customer information</li> <li>Established procedures for managing customer information downloaded from operational systems, which were enforced along the security line of all corporate organizations</li> <li>Deployed targeted email attack training at Group companies (4 in Japan, 1 overseas), conducted specialized training for staff in charge of security management, including staff in charge of security at domestic Group companies</li> <li>Confirmed the installation of CSIRT functions at domestic Group companies and visualized functions that will be required by each company</li> <li>Established procedures for handling security incidents at 7 overseas Group companies</li> </ul>	Attendance in Companywide security training: 100%	★★★
	Development of Security Specialists	Raise the skills of intermediary-level personnel Advanced level qualification: 12	Sought to bolster security skills by participating in security contests hosted by the holding company, organizing training for obtaining intermediary-level qualifications, and expanding the training menu	Number of personnel who qualified in fiscal 2017 Advanced level: 221 Intermediary level: 4 Elementary level: 11	★★
	Appropriate Management of Personal Information	Comply with the revised Personal Information Protection Law	Revised rules on information security and protection of customer information in line with revisions in Japan's Personal Information Protection Law	Same as left	★★★

Achievement levels (self-assessment set at three levels) ★★★: Target achieved, ★★: Target almost achieved, ★: Target only partially achieved

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Contents

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Contributions to Society

Contributions to the Global Environment

Respect for Human Resources

Continuous Strengthening of Corporate Governance

CSR Activity Results

Corporate Data

## Corporate Data

# About the Reporting Media

### CSR Website

The CSR website is updated with the latest information on a regular basis. Please access the site for information on the CSR activities of each NTT Communications Group company.



<https://www.ntt.com/en/about-us/csr.html>

### PDF Report Downloads

The content of the NTT Communications Group CSR Report 2018 is presented in a comprehensive manner. The report consists of a highlight version and an expanded version. We aim to provide information effectively by catering to readers envisioned for each medium.

As can be expected of a company that provides ICT services, the NTT Communications' CSR Report has been provided in electronic format since 2012.

The highlight version presents the NTT Communications Group's more important CSR activities in a clear, straightforward manner for the general public.

The expanded version presents numerous examples of the NTT Communications Group's CSR activities through a comprehensive look at specific CSR activities and detailed data.

[https://www.ntt.com/en/about-us/csr/pdf\\_download.html](https://www.ntt.com/en/about-us/csr/pdf_download.html)

#### ◆ Scope of the Report

This report covers the activities of NTT Communications Corporation and its Group companies, unless otherwise indicated.

#### ◆ Period Covered

Fiscal 2017: April 1, 2017 to March 31, 2018  
(Also contains information on activities conducted before or after this timeframe)

#### ◆ Issue Date Information

This report: October 2018  
(Previous report: November 2017; next report scheduled for October 2019)

#### ◆ Referential Guidelines

GRI Sustainability Reporting Standards 2016  
Ministry of the Environment "Environmental Reporting Guidelines 2012" (from the website)  
Ministry of the Environment "Environmental Accounting Guidelines 2005"  
ISO 26000: 2010 Guidelines on Social Responsibility

# Corporate Overview (as of March 31, 2018)

## Name

NTT Communications Corporation

## Headquarters

1-1-6 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-8019, Japan

## Date Established

July 1, 1999

## Paid-in Capital

230.9 billion yen

## Number of Employees

6,250 (NTT Communications Group: 22,050)

## Business

Domestic and international telecommunications services

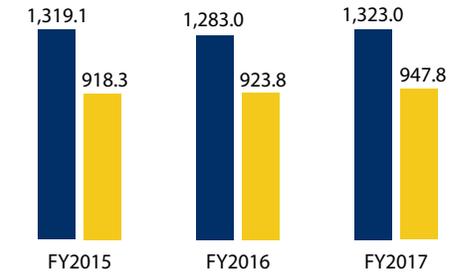
### Globally Recognized Achievements

- Won top recognition at the 2017 World Communication Awards in four categories: Best Global Operator, Best Wholesale Operator, Best Enterprise Service, and the Industrial IoT Award.
- Received the Best NFV/SDN Implementation and Most Innovative IoT Project awards at the Telecom Asia Awards 2018.



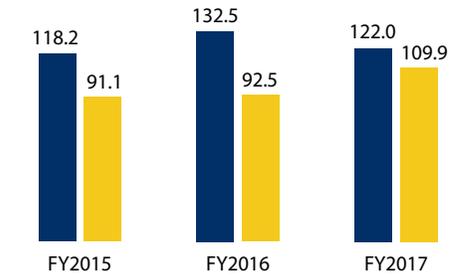
### Operating Revenues (Billions of yen)

■ Group-wide ■ Non-consolidated



### Operating Income (Billions of yen)

■ Group-wide ■ Non-consolidated



### Number of Employees

■ Group-wide ■ Non-consolidated

