

Message from the CEO



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To resolve social issues through its business operations, NTT Group works together with its partners as “Your Value Partner.”

Social and Economic Changes Resulted from the Global COVID-19 Pandemic

I would like to begin by extending our heartfelt thoughts and prayers to everyone who has fallen victim to COVID-19 or who has been otherwise impacted by the pandemic.

The restrictions on movement and production activities imposed to limit the spread of the virus have brought the flow of people and commodities that seemed so normal before to a sudden halt. The resulting deterioration of corporate performance and slowdown in consumer spending have dealt a heavy blow to the global economy.

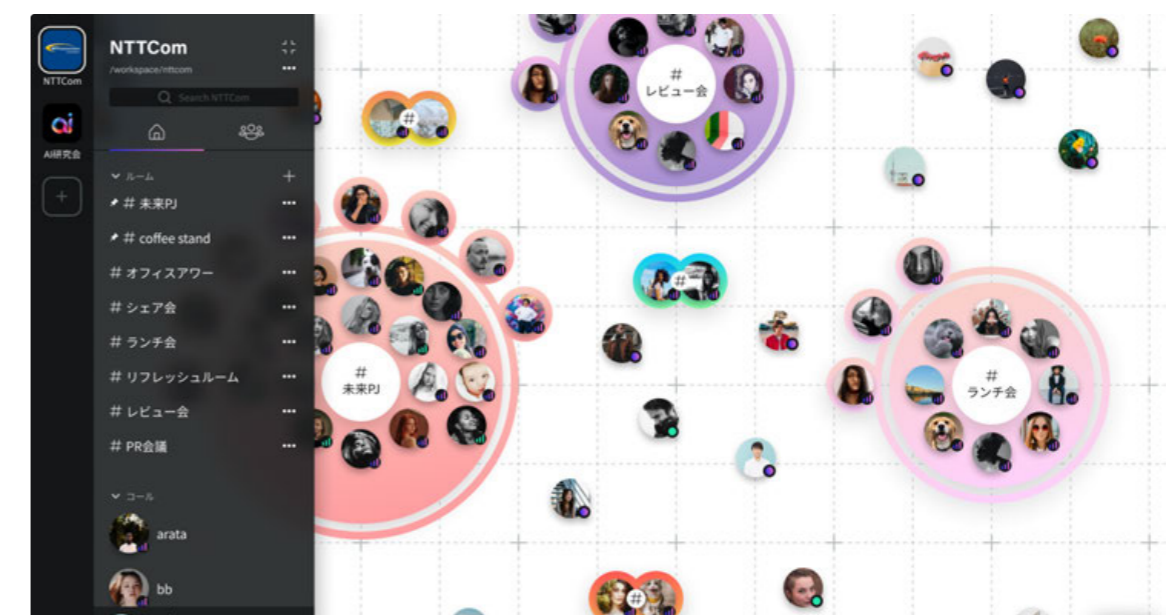
Looking ahead, we project that there will be two major changes to our society and our lives. The first will be the entrenchment of remote interactions for the purpose of social distancing. The second is a transformation in the essence of globalism as maintaining social distancing limits the movement of people, commodities, and money. These changes will drive a trend toward transitioning from supply chains developed on a regional basis across the globe to more locally installed supply chains, giving rise to a new approach toward glocalization. Furthermore, we anticipate that the need for independence and self-sufficiency with regard to energy and food will increase amid attempts to better safeguard the economy against global-scale risks such as the pandemic.

Mission of NTT Group after the COVID-19 Pandemic

Since its launch through the privatization of Nippon Telegraph and Telephone Public Corporation in 1985, NTT has been required to fulfill the missions of both a public utility and a private company. These missions will not change, no matter how significantly the COVID-19 pandemic changes the economy and society. Communications services are an important part of social infrastructure. Our mission of providing reliable, uninterrupted communications services as a public institution as designated by the Basic Act on Disaster Control Measures is becoming increasingly more important amid the current conditions. At the same time, we are pressed with our mission of generating ongoing profits as a private company. Our commitment to fulfilling the missions of both a public utility and a private company will continue to be our core emphasis going forward. At the same time, NTT Group will transform itself in response to social and economic changes in its quest to resolve social issues through its business operations together with its partners as “Your Value Partner.”

After the conclusion of the COVID-19 pandemic, we will likely see substantial changes to the work styles and lifestyles seen thus far, creating strong demand for remote solutions that deliver high levels of value, without face-to-face interaction, in areas ranging from teleworking to entertainment. To contribute to the impending society characterized by remote interactions, we are accelerating solutions business initiatives that combine the transition to cloud services for corporate activities with digitization. In addition, we are working to deliver new services that facilitate reforms to work styles and processes and improve productivity through support for the spread and entrenchment of teleworking and remote work and through digital transformations. As the first phase of our new service strategy, we announced *NeWork*, an online work space and *WindowTalk*, a service for contact-free conversations in August 2020. We intend to continue our proactive attempts to create revolutionary new Japan-originated technologies, products, and services going forward.

The arise of the new form of glocalism can be expected to prompt reforms in various industries as companies return certain parts of operations to Japan from overseas and develop trusted supply chains comprised only of countries and companies that have been deemed reliable. Against this backdrop, NTT will promote industry- and process-specific digital transformations and offer support for improving productivity across value chains spanning from raw material procurement to the manufacture and sales of products. We will also accelerate initiatives for achieving self-sufficiency with regard to energy from the perspective of sustainability and resilience.



NeWork online work space

Digital Transformations and Smart City Business

The number of B2B2X model projects being developed by NTT Group has risen from 39 on March 31, 2019, to 74 on June 30, 2020. The B2B2X model entails supporting digital transformation (DX) for service providers (the center B) and offering even more value for end users. NTT Group will further expand the application of this model through the utilization of 5G technologies.

Infrastructure for the commercial 5G services launched in the fiscal year ended March 31, 2020, had been installed in 92 cities across Japan as of June 30, 2020. By March 2021, we aim to install infrastructure in 500 cities, including all ordinance-designated cities in Japan. We will then move on to install 20,000 base stations throughout Japan by March 2022. In this manner, we look to actively promote 5G, a new transmission frequency that can offer high-speed, high-capacity communications. Using 5G technologies, NTT Group will supply services that support the shift to online and remote work in healthcare, education, manufacturing, and other fields while facilitating digital transformations in the agriculture and construction industries, which are currently highly dependent on human labor. We also intend to accelerate the provision of various forms of value in conjunction with the spread of 5G services through means such as offering new video viewing experiences, including multi-angle viewing and virtual reality, augmented reality, mixed reality, and substitutional reality viewing.

In December 2019, we formed a business alliance with Mitsubishi Corporation to promote industrial digital transformation aimed at reforming industry value chains and creating new value. This alliance marks the first time that Mitsubishi Corporation has partnered with a cross-industry ICT company as well as the first time NTT has formed an alliance with a wide-ranging comprehensive trading company in the field of B2B2X businesses. Under this alliance, we will promote efficiency and optimization in the distribution of food through digital transformations in the food distribution industry, an area Mitsubishi Corporation has shaped over the course of years. This task will be accomplished by integrating information and business processes currently split among food retailers, manufacturers, and wholesalers to eliminate unnecessary and redundant tasks across the entire food value chain.



Formulation of business alliance with Mitsubishi Corporation to promote industrial digital transformation

Furthermore, Mitsubishi Corporation and NTT have acquired a 30% stake in HERE Technologies, a global provider of location information services, through a holding company (50-50 ownership) based in the Netherlands, where HERE is located. This company's technological foundation will be utilized as a core technology for promoting digital transformations in industry.

Later, in March 2020, we reached an agreement with Toyota Motor Corporation regarding collaboration for the commercialization of smart city businesses. As core partners sharing the same values and contributing to the development of society, we will seek to create smart cities that constantly evolve in response to the needs of residents. A major factor behind this alliance was the agreement between Toyota and NTT that ownership of the data collected from smart cities should rest with the respective municipalities and should be provided as open data for free use.

Based on the precedent established by the redevelopment projects in the Higashi-Fuji area of Susono City, Shizuoka Prefecture (Woven City) and in the Shinagawa area in Minato-ku, Tokyo (a part of the NTT block in front of Shinagawa Station), we plan to develop a series of smart city businesses in Japan and abroad. This alliance will

entail a capital tie-up to the tune of ¥200.0 billion to underscore our long-term partnership. Through this investment, we hope to forge a long-term, ongoing relationship between Toyota and NTT; drive efforts to research and develop, plan, design, construct, implement, and jointly operate smart city platforms; and otherwise promote the joint operation of constantly evolving smart cities by the two companies.

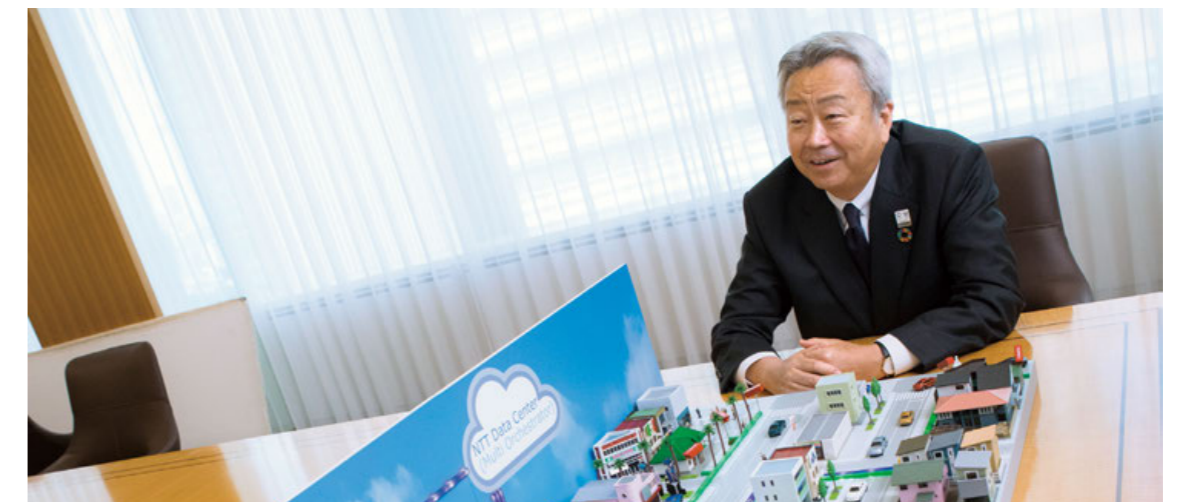


Conclusion of business and capital alliance with Toyota regarding smart cities

Enhancement of Global Business Competitiveness

To enhance its global business competitiveness, NTT Group has been leveraging the strength of its capacity for one-stop supply of everything spanning from solutions to communications infrastructure to support the evolution of customer businesses and promote innovation. We have also implemented various reforms to build platforms for concerted efforts as a united "One NTT." These reforms have included the integration of operations into global operating company NTT Ltd. and the opening of overseas research laboratory NTT Research, Inc. We have also been strengthening the NTT brand through global sporting events. For example, we have concluded a technology partnership agreement with Major League Baseball in the United States, and NTT is the entitlement sponsor of the IndyCar Series while NTT Ltd. is an official technology partner of the Tour de France. Meanwhile, in our smart city business, in which we have undertaken the verification and commercialization of a smart city project in Las Vegas, Nevada in the United States, we have commenced our first verification test in Asia. Collaborating with local stakeholders, this test is taking place in Cyberjaya, Malaysia. We are also developing smart city projects in Austin, Texas and at the University of California, Berkeley in the United States as part of our efforts to grow this business on a global scale.

The fiscal year ended March 31, 2020, also saw the rapid advancement of operation consolidation and other structural reforms. The benefits of these efforts are gradually emerging, as can be seen in the fact that NTT Ltd. is poised to achieve profitability in the fiscal year ending March 31, 2021, despite the difficult operating environment created by the global COVID-19 pandemic. Going forward, we will continue to advance structural reforms while transitioning to structures for delivering high-value-added services in order to achieve further growth.



Strengthening and Globalization of Research and Development

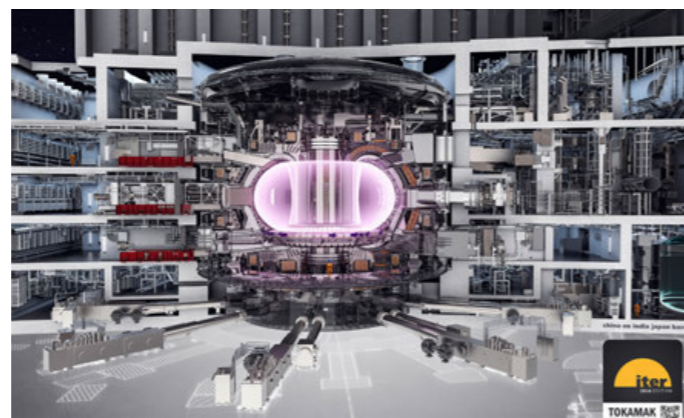
NTT is advocating the Innovative Optical and Wireless Network (IOWN) network concept aimed at using optical and other cutting-edge technologies to realize networks and information processing platforms characterized by ultrahigh capacity, ultralow latency, and ultralow electricity consumption. IOWN comprises three main technology components: all-photonics networks that use photonic-based technologies for everything from networks to terminals, the Cognitive Foundation® service for linking and controlling various different articles, and digital twin computing for projecting future trends by comparing the physical world with digital models. Optical technologies are at the heart of this network concept. This is an area in which NTT has continued to create world-first and world-leading results. Moreover, there is significant potential for Japanese communications and IT companies to grow in the field of optical technologies. We therefore aim to act as a game changer in this field.

Collaboration with companies and organizations on the leading edge of their fields from around the world is imperative in making the IOWN concept a reality. Based on this recognition, we established the IOWN Global Forum, a forum for open discussion, together with Intel Corporation of the United States and Sony Corporation of Japan in January 2020. By coordinating with various partners to standardize next-generation infrastructure, we aim to contribute to the creation of new services and markets.

In addition, NTT Group is moving forward with research and development on cutting-edge environmental and energy technologies as one initiative eyeing the application of optical technologies in relation to the IOWN concept. With this regard, we have formed a comprehensive cooperation agreement with the ITER International Fusion Energy Organization, which has the objective of building the world's first experimental hydrogen fusion reactor. This was the first time for a Japanese company to form such an agreement with ITER. Through this cooperation, NTT is examining the possibility of utilizing IOWN technologies to support the ITER project goal. Areas in which these technologies may be utilized include the development of network technologies for realizing ultrahigh-speed, ultralow-latency connections between the fusion reactor and control centers. The technologies may also be used for developing the sophisticated calculation technologies required for performing the cyberspace calculations using digital twin computing needed for reactor control simulations entailing



Interview from Bloomberg at CES 2020



ITER experimental hydrogen fusion reactor

massive amounts of computational processing. NTT Group looks forward to offering technical support for information distribution and control platforms as part of the effort to create a revolutionary form of clean energy through nuclear fusion.

NTT Group has commenced research and development of a 4D digital platform to support digital twin computing. This platform will be able to weave sensing data from people, objects, and occurrences into highly precise spatial information in real time in order to integrate data with various industry platforms and make future predictions. We are also collaborating with ZENRIN CO., LTD., a company that boasts significant map data collection and management capabilities and a wealth of map production expertise. Through this collaboration, we will jointly develop a sophisticated geographical space database with a wealth of highly accurate semantic information by capitalizing on NTT Group's high-precision positioning technologies and high-accuracy map development and infrastructure maintenance management know-how. We anticipate that the utilization of this 4D digital platform for various industry platforms will contribute to the growth of new businesses.

NTT Group also announced an alliance with NEC Corporation in June 2020. This alliance is aimed at the joint research and development and the global rollout of ICT products utilizing innovative optical and wireless technologies. There are two major goals for this alliance. The first is to make the IOWN concept a reality. Through joint development with NEC, we will first seek to endow digital signal processing circuits, microprocessors designed specifically for digital signal processing, with high performance and low electricity consumption so that we can develop and sell information communications equipment embedded with these processors. Then, over the medium- to long-term, we will coordinate efforts to increase the capacity of optical and wireless devices and optical transmission systems. The second goal is to promote the O-RAN (Open Radio Access Network) open architecture together with NEC. Through development and global rollout of products boasting international competitiveness together with NEC, we aim to install infrastructure that will allow communications companies to flexibly construct 5G and other networks. We intend to conduct joint research and development in a myriad of fields through our alliance, and research and development will therefore need to be carried out from a medium- to long-term perspective. For this reason, NTT paid ¥64.5 billion to acquire 4.8% of NEC's stock with the aim of building a healthy collaborative relationship that will be beneficial over the long term.



Conclusion of business and capital alliance with NEC

Pursuit of Ongoing Improvements in Corporate Value

NTT is required to fulfill the functions of both a private company and a public utility. To a greater degree than other companies, we are considered to be a public institution. In other words, our contribution to society is equivalent to increasing our corporate value. Promoting management based on environmental, social, and governance (ESG) factors has been and will continue to be NTT's mission. We aim to anticipate changes in the world and take steps to address them ahead of time through various measures.

Looking at the E, or environmental initiatives, in May 2020, we announced our environment and energy vision; zero environmental impact. Based on this vision, we will contribute to reducing the environmental impacts of customers, companies, and society. NTT is a major consumer of electricity, accounting for close to 1% of Japan's electricity consumption. To address this consumption, we have set the goal of sourcing more than 30% of our

electricity from renewable energy by the fiscal year ending March 31, 2031, and the use of green energy is being promoted accordingly. We also want to provide renewable energy to other companies. If the number of companies that share our ambitions increases, it will raise the rate of renewable energy usage of Japan as a whole along with the country's self-sufficiency in terms of energy. Our renewable energy initiatives are shaped by an ESG perspective as well as by our desire to contribute to the sustainability of society and the economy. NTT Group is also engaged in a variety of other environmental activities, including participating in climate change-related initiatives, endorsing the recommendations of the Task Force on Climate-related Financial Disclosures, and issuing green bonds. Furthermore, the Space Environment and Energy Laboratories was established in July 2020 to spur the creation of revolutionary environmental and energy technologies. NTT Group is pursuing innovation that surpasses current limitations in fields such as smart energy to help regenerate the global environment and realize a sustainable and inclusive society.



International Women's Day event



OriHime-D a remote avatar robot

In S, the social aspect, we consider our business of providing uninterrupted ICT services itself to be our social responsibility. Large-scale natural disasters, such as typhoons and heavy rains, have become increasingly frequent in recent years. Such disasters can have a massive impact on communications equipment and services, resulting in increasingly long downtimes. Accordingly, there is a need to improve the resilience of facilities, through countermeasures against blackouts and other provisions, and to expedite recovery efforts through AI-powered damage prediction. In September 2020, NTT formed a social contribution coordination agreement with KDDI CORPORATION. Under this agreement, we will promote mutual utilization of ships for transporting the necessary supplies in the event of a large-scale disaster. In addition, we have begun joint disaster preparedness drills and awareness-raising activities. By coordinating in areas where there are significant benefits to be had through the mutual use of our assets, we aim to contribute to the resolution of various social issues.

Turning to threats other than natural disasters, security will be more important than ever to business continuity after the COVID-19 pandemic. As the trend toward teleworking and remote work spreads rapidly, we will need to protect against cyberattacks and various other threats to ensure business continuity for NTT Group as well as for its customers. Accordingly, we will be deploying various services to offer even greater levels of support on this front.

We also recognize that the utilization of a diverse range of human resources will be crucial for the evolution of NTT Group. With this regard, we joined The Valuable 500, an international initiative promoting the employment of people with disabilities, in December 2019 as part of our ongoing efforts to promote diversity and inclusion. As one of these efforts, we use the *OriHime-D* a remote avatar robot to greet visitors at the reception desk of NTT. People who face difficulties going outside can remotely control this robot to guide visitors to meeting rooms and answer



questions. NTT Group looks to develop such new work styles suited to a society characterized by remote interactions by reinventing work processes through digital transformations. Furthermore, we will entrench and promote teleworking as a new standard work style on a Groupwide basis.

In terms of the G, or governance, the Company continues to strengthen governance systems to improve corporate value. Specifically, we have revised the operating procedures, scale, and composition of the Board of Directors to invigorate strategic discussion at Board meetings. These revisions have resulted in the ratio of outside independent Members of the Board rising to 50%. In addition, an executive officer system was introduced to clearly separate the management decision-making and oversight function from the operational execution function. The reinforcement of corporate governance is being pursued to enhance management flexibility.

In the midst of the global COVID-19 pandemic, we took steps to ensure our communications services could be reliably accessed while exercising consideration for our various stakeholders through a variety of measures, including providing leeway in regard to payment dates and offering certain services for free. As for shareholder returns, our basic policy for dividends is to continuously increase dividend payments. The planned dividend for the fiscal year ending March 31, 2021, is ¥100 per share, an increase of ¥5 per share from the previous fiscal year, making for the 10th consecutive year of dividend increases.

NTT Group will accelerate its transformation as "Your Value Partner," aiming to continue being a reliable partner to its stakeholders, including customers, shareholders, and local communities. In doing so, we will focus all of our efforts on sustainably increasing our corporate value and contributing to the realization of a smart world.

I ask all of our shareholders and investors to continue supporting our efforts.

September 2020