

Risk Management

Policies and Concepts

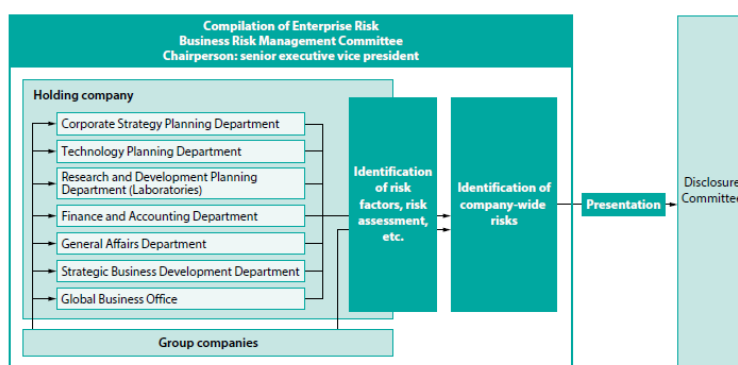
The NTT Group faces a rapidly changing business environment, including intensified competition in the information and telecommunications sector. In this context, NTT Group companies are exposed to an increasing amount of business risk.

The NTT Group strives to minimize the impact of losses that could result from the materialization of risk by anticipating and preventing the occurrence of potential risks. As part of these efforts, NTT has formulated the NTT Group Business Risk Management Manual and has distributed it to all Group companies so that the entire Group can work together to conduct risk management. This manual contains policies for addressing various forms of risk facing the NTT Group's business operations and approaches to coordination among NTT Group companies.

In addition, each Group company has formulated its own manuals and other guidelines, which reflect its specific business operations, business environment, and other factors, and is using these materials to control business risks.

Organization for Implementation

At NTT, Risk Management Regulations are in place, which define fundamental policies concerning in-house risk management for effective and efficient business operations. Risk management is carried out based on a continuous PDCA cycle under the leadership of the Business Risk Management Committee, chaired by the representative director and senior executive vice president, and comprised of heads of departments and offices as committee members.



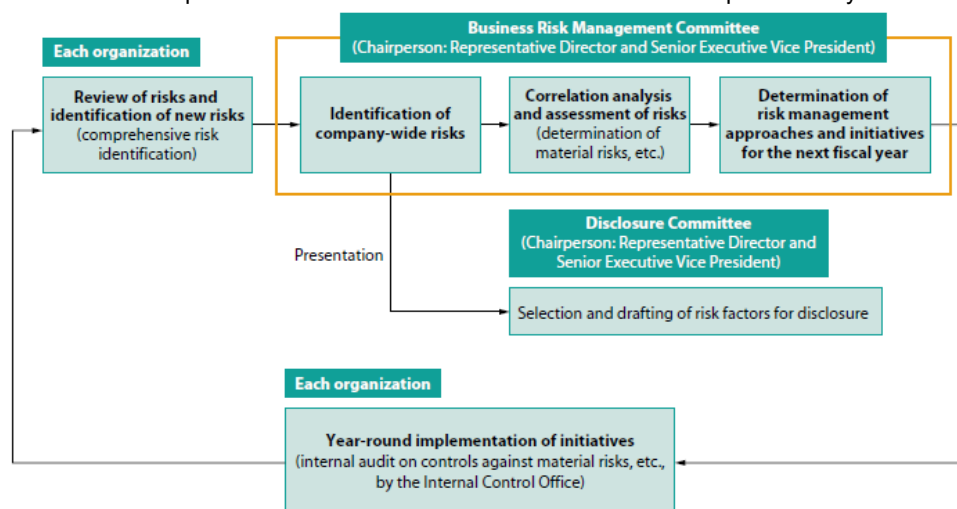
At the NTT Group, the representative director and senior executive vice president of NTT is assigned ultimate responsibility for risk management, while each executive officer serves as the risk officer for the business area they are placed in charge of.

Identifying Material Risks

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

In the identification of Companywide risks, the Business Risk Management Committee leads analysis processes for the risks faced by the NTT Group are formulated and periodically implements risk analyses in accordance with these processes. In addition, after a correlation analyses on these risks, it specifies those risks with the potential to have the greatest impact as material risks, and we decide on countermeasures.

Matters pertaining to risk management are discussed at meetings of the Business Risk Management Committee. As part of risk monitoring, each department in charge reports on the status of monitoring and risk mitigation effects to the Business Risk Management Committee, while the Internal Control Office conducts individual audits on the status of initiatives to address material risks and reports results to the Board of Directors in the subsequent fiscal year.



Response to Individual Risks

<Important Risk>

Risk from Cyber Terrorism

In recent years, as threats related to information security have become increasingly sophisticated and diversified, causing incidents such as damage due to cyber attacks and information leaks to emerge as social problems, developing information security countermeasures for smartphones, cloud services and other new ICT services have been a growing concern.

Major Risks that May Adversely Affect Business Performance and Financial Condition

- Service interruptions or disruptions in the quality of services caused by cyber attacks, such as unauthorized access to the NTT Group's communication networks, servers, or other equipment
- Damage to the NTT Group's credibility and corporate image caused by intrusions into company networks that result in the leakage, tampering, or loss of information
- Deterioration in the NTT Group's business performance and financial condition caused by the above situations

In consideration of these risks, the NTT Group has sought to reinforce the security of its network by applying the latest research results, further enhancing early its detection and rapid response capabilities, and bolstering initiatives for hiring and fostering security experts with superior skills.

Risks Caused by Catastrophic Disasters

NTT Group has operations both domestically and abroad, and supports society and business activities through its telecommunications networks and information systems. In addition, NTT Group provides a multitude of services that serve as necessary lifelines that ensures people's safety in their everyday lives.

With respect to the provision of these services, natural disasters such as earthquakes, tsunamis, typhoons and floods, and other issues including a larger-than-expected increase in telecommunication traffic, terrorism, armed action, regional conflict and various other events could cause system and network failure or threaten the safety of NTT Group employees. As a result, there may be occasions when disruptions in the NTT Group's business operations make it impossible to provide reliable services, which may lead to the NTT Group being held liable for related damages, potentially damaging the NTT Group's credibility and corporate image. A large-scale disaster in particular could not only severely damage the NTT Group's telecommunications networks, but could also harm NTT Group employees or cause damage to systems that could take a long time to restore, and the resulting emergency electricity use restrictions could hinder the NTT Group's ability to provide reliable services.

In consideration of these risks, the NTT Group has implemented a variety of measures, including reinforcement of aseismic capacity and flood prevention of telecommunications buildings, reassessing its transmission lines, strengthening emergency power sources for telecommunications buildings and base stations against long-term blackouts, and improving initial response to restoration activities by AI-driven damage prediction. Through these various efforts, the NTT Group is taking steps toward ensuring safe and secure operations of its networks and systems which are essential to the provision of services.

The NTT Group also provides and delivers systems and services to customers in the system integration business, which typically operates under a service contract model in which services are completed from the receipt of orders through the delivery dates.

As a result of this model, the NTT Group generally assumes full contractual responsibility at all stages, but there is a possibility that a deviation from initial estimates or problems in project management at the development stage could result in cost overruns or losses due to delivery delays.

In consideration of these risks, for projects that are above a certain size, the NTT Group has a review committee review cost estimates and the feasibility of project plans, and also monitors the progress of projects after they have been commissioned.

Investment Risk

The NTT Group engages in joint ventures, alliances and collaborations, as well as acquisitions and other strategic investments to expand its global business operations in particular in response to changes in market structure and customers' needs. Meanwhile, there are inherent risks to such investment activities.

Major Risks that May Adversely Affect Business Performance and Financial Condition

- The NTT Group may not be able to maintain or enhance the value or financial performance of, or achieve sufficient synergies with, the domestic or overseas operations in which it has invested or agreed to invest or acquire in the future
- The NTT Group may suffer potential losses resulting from the dissolution or disposition of its investments, partnerships, or other cooperative initiatives
- The increasing number of foreign subsidiaries may increase fragmentation within the Group and render a common

understanding difficult to achieve or make it difficult for NTT to exert the necessary control over its overseas subsidiaries to oversee their business and operations

- Factors related to cross-border business, such as legal restrictions relating to investment and competition, differences in tax systems, differences in business customs including contract practices, labor relations, and international politics, may pose challenges to the NTT Group's management of its overseas business activities

In consideration of these risks, the NTT Group is proactively striving to expand its global business operations, and has worked to achieve expected returns from these endeavors by carrying out periodic post-acquisition monitoring of its investments. In addition, the NTT Group established a global holding company, NTT, Inc., and is taking initiatives to further enhance the group governance and risk management of its global business.

Risk from Compliance Violations

The NTT Group is subject to a wide variety of laws and regulations, as the scope of its business encompasses a variety of products and services both in Japan and abroad. As a result, some of NTT Group business activities require licenses, notifications, and permit approvals. In addition, it is possible that the NTT Group's growing business operations, especially outside of Japan, could be subject to additional burdens stemming from, among other things, the local rules and regulations of the countries in which NTT operates, or the lack thereof, the unpredictable nature of commercial and judicial interpretations of such local laws, the adoption of new laws and the revision of existing laws, which in turn are associated with risks.

Major Risks that May Adversely Affect Business Performance and Financial Condition

- Risks associated with compliance violations and reputational risk from loss of credibility due to incidents including an employee's improper personal behavior with respect to laws and regulations
- Risks arising from a decline in the NTT Group's reputation and credibility, which may affect the Group's ability to obtain new subscribers or its eligibility to secure governmental contracts

In consideration of these risks, based on the NTT Group's understanding that legal compliance is an extremely important corporate responsibility, the NTT Group is working toward further strengthening its compliance systems in light of the tightening of bribery and anti-corruption laws in foreign countries, particularly the United States and the United Kingdom.

There is increasing societal demand to ensure the protection of confidential information, such as customers' personal information, as well as increasing requirements to protect such information from a legal standpoint.

However, given the further sophistication of criminal activities aimed at obtaining personal information and other confidential information, it is possible that the NTT Group will be unable to eliminate the risk of a leak or misuse of confidential information.

In consideration of these risks, the NTT Group has historically made efforts to protect confidential information, such as its customers' personal information, and the NTT Group has also implemented the NTT Group Information Security Policy, which requires enhanced internal information management, training and awareness-raising for officers and employees. The NTT Group expects to continue being able to ensure the proper management of confidential information in accordance with this policy.

<Emerging Risks*>

Climate-Related Risks

Responsible for environmental activities across the whole Group, the Environmental Protection Office identifies environmental risks that could affect our businesses both environmentally and financially. As for the risks and opportunities with respect to individual facilities and equipment, monitoring and assessment are conducted through a collaborative effort between staff in charge of environmental issues and those responsible for facilities, and these individuals are appointed for every Group company. We consider future climate change a particularly imperative issue and are therefore working toward the environmental targets that have been set for the years leading up to 2030 (see page 032).

Service interruptions caused by damages to telecommunications equipment could occur frequently, owing to the increased scale and frequency of natural disasters such as torrential rainfall and typhoons attributable to climate change. This could lead to secondary affects due to the interruption of important telecommunication services, such as the 110, 119 and 118 numbers, and the inability to quickly restore services in such situations could damage the Company's reputation. In response, we are working to mitigate these effects should a natural disaster strike. This includes the use of multi-routing for telecommunications networks and reinforcing disaster prevention measures of telecommunications buildings. Furthermore, we are also implementing measures that will enable us to quickly restore services in the event of a disaster by expanding the use of disaster resilient equipment and conducting regular training drills for disaster response personnel.

Please see page 042 for details about climate change risks and opportunities.

Risk of Workforce Shortages Caused by the Acceleration of the Reverse in Globalization

The recent political trend indicating the emergence of nationalism and populism, and growing worldwide uncertainty about the rise in physical and cyber terrorism, could potentially cause a reversal in globalization, restricting the freedom of

movement of human resources and making it difficult for the NTT Group to secure the labor force it requires. Specifically, shortages of cyber security personnel could inhibit responses to security incidents that occur at customers or within the NTT Group, making it difficult to sustainably grow the security business, which is a core strategic business of the NTT Group. In turn, this could affect the Company's financial performance and damage its reputation.

In response to this risk, we are stepping up hiring of security personnel at Group companies inside and outside Japan as well as enhancing industry-wide training programs for developing the talent we require. Additionally, we are working to prevent incidents and minimize damage based on early detection of incidents and rapid response as part of our cross-functional security response across the NTT Group through NTT-CERT, which offers personnel who are experts in advanced, cutting-edge security.

*Significant risks caused by unexpected changes.

Management and Financial Risks Caused by the COVID-19 Pandemic

The COVID-19 pandemic continues to affect the entire world. The prolonged outbreak may have a significant impact on NTT Group business activities, as customers scale down their business activities, causing declines in system integration orders and in the sales of various services, or delays in construction plans. Even after the outbreak has been contained, daily lifestyles and corporate behavior may undergo significant changes, which consequently might affect the NTT Group's business performance and financial condition. In consideration of these risks, we are working to ensure the health and safety of all our stakeholders, including our customers, partners, and employees, while at the same time ensuring stable telecommunication services that are vital for everyday life and corporate activities. Meanwhile, the post-infection period may give rise to a data-driven society caused by a rapid expansion in working from home, remote healthcare, remote education, and other measures associated with social distancing. The NTT Group will accelerate the provision of services that promote a remote society and will drive the advancement of technologies such as authentication control.

The NTT Group is a designated public institution* under Japan's Act on Special Measures for Pandemic Influenza and New Infectious Diseases Preparedness and Response. We have formulated an Operation Plan in Response to Pandemic Influenza and New Infectious Diseases from the standpoint of executing our responsibilities and respecting human lives. Under the plan, we endeavor to secure communications for emergency situations and provide priority use of telecommunications required for implementing emergency measures while also taking appropriate preventive actions to limit the spread of infections insofar as possible and protect the lives and health of our employees and the general public.

* NTT, NTT East, NTT West, NTT Communications and NTT DOCOMO are designated public institutions.