

Business Continuity

Policy

NEC promotes business continuity management (BCM) in order to fulfill its social responsibility to maintain the operation of various backbone systems, database, various communication devices and systems that we provide when a disaster occurs. BCM also makes it possible for us to fully satisfy the supply-chain responsibility and to rush to our customers to be involved in the recovery of social infrastructure as soon as possible when risk occurs.

Through BCM, each NEC Group company takes into account the risk at normal times and implements disaster reduction measures to reduce damage in each division, while providing a variety of training and education enabling its employees to consider the risk as personal matters to act proactively with the knowledge of the common rules at the time of disaster. NEC also sets up a Business Continuity Plan (BCP), as deliverable of BCM, to brush up its contents year by year.

NEC has established the following three specific disaster response policies.

1. Ensure the safety of employees and visitors.
2. Fulfill NEC's social responsibilities (Maintenance and recovery of backbone systems for communications, public infrastructure, traffic, defense, finance, etc.).
3. Minimize management damage caused by operation disruption.

Activity Objectives, Achievements and Progress

Objectives for the Mid-term (from fiscal 2019 to 2021)

1. Provide a variety of training and education keeping in mind the largest disaster risk (natural disaster/ pandemic) toward business continuity in each business site, and increase the number of employees who consider the risk as personal matters to act proactively when risk occurs.
2. "Visualize" the business continuity level continuously in each division while incorporating the Business Continuity Management System (BCMS) into the organizational culture.

Objectives, Achievements and Progress, and Degree of Completion

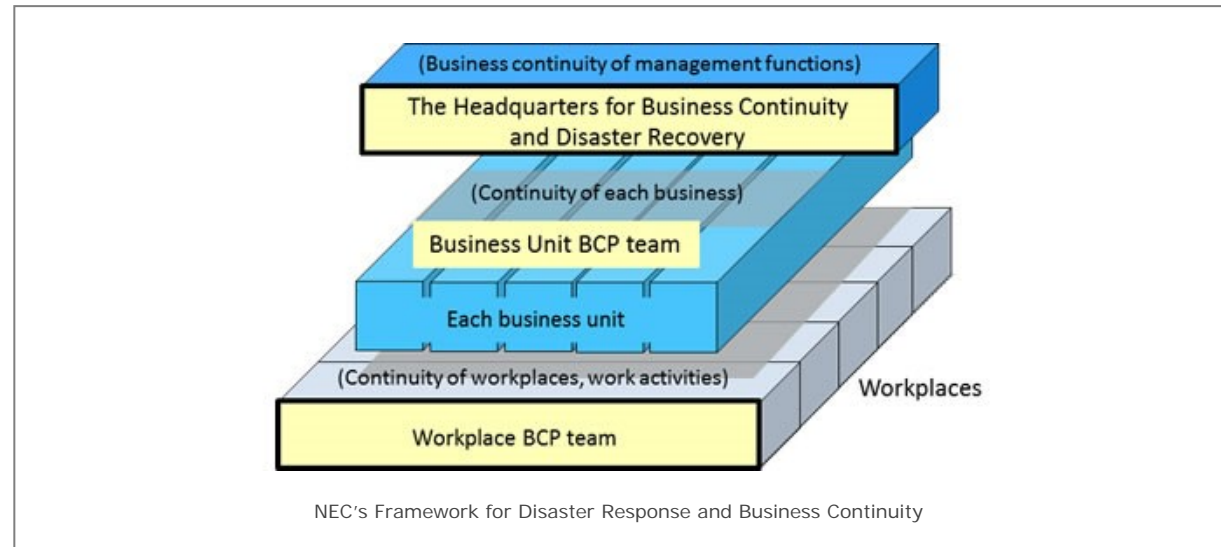
(Degree of completion: ◎Achieved, ○Mostly Achieved, △Some Progress, ×No Progress)

Objectives for the Mid-term	FY2018 Objectives	FY2018 Achievements and Progress	Degree of Completion	FY2019 Objectives
1. Prepare action manuals and conduct training for tsunami-prone areas. • Prepare an action manual for tsunami-prone areas on the Sea of Japan announced in FY2017.	• For FY2018 is the third year of the 3-year plan, provide an education in areas where it could not be offered in the first and second years, and an education based on the verification result of the Giant Tsunami on the Sea of Japan side announced in 2015.	• Completed all education in tsunami-prone areas. Provided an opportunity for every employee to think about the dangers in the area and the action to be taken when tsunami occurs.	◎	• (Temporarily to be ended as a mid-term objective) Continue training and education based on findings such as tsunamis and its run-up in rivers.
2. Implement "visualization" by applying maturity level of Information Security Management System (ISMS) to BCMS. • Refine the system based on the merits and reflection points for improvement determined during the implementation in FY2017.	• For FY2018, the second year of the 3-year plan, improve the prototype of the FY2017 with the merits and reflection points in mind. • Brush up each division's disaster prevention and business continuity capabilities by comparison with those in the previous year. • Improve the business continuity capability at the time of a pandemic, other than natural disaster such as earthquake and flood, through training offered in February 2017.	• Systemize an internal audit of BCP for business continuation to reduce the required manpower by 26 to 35% (Data differs depending on the business unit). • As the internal audit streamlined, proceeded with verification of the effectiveness, efficiency and adaptability for the environmental change of business continuity.	◎	• Further reduce required manpower by linking the materials such as education, or training, to be uploaded to the verification for the internal audit.
3. Increase the number of employees who can capture the risk as their own events and can act proactively when risk occurs.	—	—	—	• In the education and training, provide situations where each employee can consider the risk as a personal matter. • Create an environment where he/she can be aware of the risk and perform a pre-disaster mitigation and behavior simulation.

Promotion Framework

NEC maintains proactive and flexible business continuity through the following right three functions as shown in the figure at right.

- (1) Headquarters for Business Continuity and Disaster Recovery
Administer the BCP for management function to maintain top management decision-making and restore operations.
- (2) Business Unit BCP team
Administer the BCP for each business to recover specific businesses, such as collecting information on damage to customers and operations, securing the personnel needed, and securing materials supply and distribution routes.
- (3) Workplace BCP team
Administer the BCP for each workplace, secure the safety of workplaces, confirm the safety of employees, and support employees' life and, collaborate with communities.



Main Activities and Results for Fiscal 2018

Disaster Prevention 4.0

In February 2017, the government of Japan released its "Disaster Prevention 4.0" as a national policy.

In Disaster Prevention 1.0 to 3.0, measures were implemented that included legislation, systemization, advance preparation, etc. to strengthen responsiveness to disasters in mainly government and local governments. Disaster Prevention 4.0 requires every citizen and employee to become more aware of disaster prevention based on the following objectives:

- Each person considers disaster prevention as a personal matter.
- Each person acts proactively.

Promptly Responding to Disasters and Risk Occurred

Since 2004, NEC has been consistently nurturing its employees under the objective of "proactively thinking and acting when disaster occurs". An environment has been created in which employees can act proactively by implementing measures to mitigate disaster damage beforehand, an information sharing system, rules and a code of conduct. NEC has been disseminating these rules and schemes through education and training and cultivating employees who can act proactively when the risk of disaster actually occurs. This allowed NEC to promptly respond to disasters in the past.

Requests for Case Studies from Inside and Outside of Japan

There were 83 requests to present case studies in relation to NEC Disaster Prevention 4.0 over one year since March 2017.

Those clients who made requests were government offices, local governments and companies not only in Japan but also in foreign countries. Accordingly, NEC held lectures and briefing sessions at the client's sites or provided information and materials.

NEC Disaster Prevention and Business Continuation Basic Policy

2004.9: Established / 2006.2: Approved at Strategy Meeting

NEC provides a lot of social infrastructure. If NEC's initial response is early, it is able to recover local infrastructure early. This means that:

- NEC secures the life and safety of its employees and visitors,
- NEC provides some relief for employees and visitors by securing necessities such as food and toilets, etc.,
- NEC makes the place where our business will be continued safe, and
- NEC assigns manpower secured by providing logistical support, replacement personnel and component from non-affected areas to restoration work at the customer's site.

Implement measures and training to mitigate disaster in advance repeatedly to cultivate many employees who "can think and act proactively when the disaster occurs".

Build an "information sharing system" that does not stop when the disaster occurs and make it available to anyone at any time.

A company cannot continue its business without recovery of the local community. As a corporate citizen, NEC contributes to the restoration, safety and security of the local community.

NEC resumes its operations early to offers jobs and security by restoring infrastructure (transportation, electricity, communications, etc.) by its maintenance team.

Training on Disaster Prevention and Business Continuity

In order for each employee to think about disaster and business continuity as a personal matter and to act proactively when the risk occurs, NEC offers training enabling such employee to think and act proactively and implements other various measures. In fiscal 2018, NEC conducted education and training for disaster prevention and business continuity in September, November 2017, and January 2018.

Group-wide Training for All Employees, Business Continuity Plan Walk-through in September and January

NEC holds business continuity training for participation by all the employees every September and January. These are usually held on predetermined dates and times but sometimes an unannounced training is held in the form close to the time of risk occurrence.

In September, we implemented the training to consider the following issues in each workplace in addition to the regular training.

- Toilet problems at the time of disaster.
- In normal times, each school implements the pick-up training for parents and students but what should be done if it is difficult at the time of disaster?
- How to respond to someone in the workplace who requires assistance at the time of disaster.
- How to respond to someone who requires nursing or care services at home at the time of disaster.

And we implemented the training in each workplace so that its employees could think and act proactively about the actions that should be taken and how the information should be shared among family members, etc.

Tsunami Disaster Prevention Training during the "World Tsunami Awareness Day" on November 5

Around November 5, 2016, the day designated as the "World Tsunami Awareness Day", we held a drill at NEC Group locations considered as tsunami-prone areas. As the final year of the 3-year plan the drill was aimed at determining what to do to confirm the expected tsunami damage in Hiroshima, Hakodate, etc., and deciding what preparations and actions should be taken in worst-case scenarios, while incorporating customer and client perspectives. At the same time, a drill was also held on information-sharing with suppliers outside the NEC located in the tsunami-prone areas.

Business Continuity Training Simulating a Pandemic of New Influenza Strains in November

NEC conducted the following training sessions following the basic training for infectious diseases in February 2017:

- Training to register information related to the pyrexia management/information sharing system supposing early stages of infectious disease within the country.
- Basic training (online training) on differences in response to seasonal influenza and new highly virulent influenza.
- Remote training by officers and executive officers.

NEC has been expanding its business since the 1990s under the slogan "anytime, anywhere, and with anyone". The slogan was run at this training, and the president and emergency officers gathered in a conference room at the company headquarters. Other officers and executives who are responsible for business execution participated in a remote meeting from various sites in Japan and overseas and underwent training on how to proceed with business when a pandemic occurs.



Remote meeting with offices in various sites in Japan and overseas

Prompt Response to Diversifying Disasters and Risks

There has been a rash of disasters and risks in fiscal 2018. In addition to July's heavy rainfall in Asakura in Kyushu, we responded to an earthquake in Mexico in September, major typhoons in September and October and a J-Alert in August and September.

Since NEC has been promoting "Disaster Prevention 4.0" – "Each employee thinks about disaster as a personal matter" and "acts proactively", employees were able to respond to the situations proactively. However, some employees had concerns about how to respond to risks for which they had not been trained.

To this end, NEC further promoted the visualization of objective ranking of "how each organization has incorporated its disaster prevention measures and business continuation initiatives into the organizational culture", something NEC has been working since fiscal 2017.

48-49 Corporate Governance
55 Basic Approach on Tax Matters
60-66 **Business Continuity**
73-79 Supply Chain Management

50-54 Compliance and Risk Management
56-59 Promoting Fair Commercial Transactions
67-72 Information Security and Cyber Security
80-83 Ensuring Quality and Safety

The figure below shows how NEC visualized disaster preparedness and business continuity capability levels for each division and company by using indices such as “organizational state in regular time and at the time of disaster”, “leadership”, “disaster prevention and business continuity plan”, “support status”, “effective operation” and “evaluation and improvement”. We will further improve the accuracy of the rankings and refine the system to enable divisions and companies to incorporate disaster preparedness and business continuity in their organizational cultures and enable members to think and act independently during occurrence of disasters.



For overseas, starting fiscal 2016, we have adopted a system for conducting self-checks on disaster preparedness and business continuity in each company, and “visualized” the effectiveness and levels of business continuity plans prepared by each company.

In fiscal 2018, the third year of implementation, we confirmed the extent of annual improvements based on past results. At the same time, we reviewed how to proceed with the business continuity initiative and are creating an action plan.

Initiatives Overseas

NEC addresses all NEC Group companies of the notification rules in a disaster and assigns the persons in charge in each company. We have constructed a system to understand and share information on the damage status of overseas subsidiaries under the five regional headquarters. We have prepared BCPs to cover country and regional risks for main overseas subsidiaries.

Moreover, we have a web system to collect and analyze information during initial-response phases at the Business Continuity and Disaster Recovery Headquarters in Japan. To verify effectiveness, we have conducted escalation exercises for all overseas subsidiaries twice a year since fiscal 2013. We are prepared to quickly resume businesses by minimizing the damage in a disaster.

Acquisition of ISO22301 Certification for Entire Value Chain

NEC, consistent with its being a provider of social infrastructures, has established Business Continuity Management Systems (BCMS) not only for the entire company as a whole, but for each unit and for each business area, to enable each unit and company to proactively and organically carry out recovery activities in the event of disasters. To make these systems internationally acceptable and applicable, we acquired “ISO22301” certification in various business areas, such as telecom carriers, systems, and datacenters.

The business-related fields for which ISO certification has been obtained cover the entire value chain, from design and system construction to manufacturing and maintenance. The number of these certifications obtained is the largest among companies in Japan.



“ISO22301,” third-party certification

Certificate of Appreciation for Two Consecutive Years Awarded by the WFP

In company cafeterias and stores, NEC has sold food and water which have been stockpiled for disasters but of which the expiry date is off to a half a year. Some of the proceeds have been donated to the WFP.

During the period from 2016 to 2017, the campaign donated 3,941,105 yen, with a total donation reaching 10,189,025 yen; NEC received a certificate of appreciation for two consecutive years. This campaign not only promotes saving food but also contributes to the mitigation of adverse effects on the environment by discarding food while realizing a social contribution.



Receiving the certification of appreciation for two consecutive years from the WFP.



Selling food stockpiled for disasters in the store.



Offering dishes using food stockpiled for disaster in the company cafeteria.