

# NEC Solutions - Supporting Our Customers' Business Continuity

At NEC, we have always focused on business continuity and disaster recovery planning in our efforts to live up to the absolute trust deposited on us by the Japanese society. Our perception is that in order to ensure life savings and business continuity in case of a large-scale natural disaster or accident it is essential to establish a social infrastructure that allows for self-help, mutual help, and community-level assistance through the cooperation among companies, local governments, and communities. Based on this perception, we provide products, services, and solutions in a systematic way to support this effort in the IT/network aspect. In this special issue, we explain NEC's Business Continuity (BC)/Disaster Recovery (DR) services, and also NEC's own activities in that area.

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## 1 Introduction

Business Continuity (BC) and Disaster Recovery (DR) services are widely disseminated in western countries which include: (1) conducting the necessary planning for business continuity by companies, (2) designing and implementing substitute remote IT systems including office environments, and (3) operation services.

In Japan, information backup systems and remote storage of backup data for disaster recovery have a long history. However, given the unprecedented proportions of recent disasters and the companies' increasing social responsibility, reviewing current disaster recovery plans from the standpoint of BC often leads to an increasing necessity of new actions.

NEC has focused on the BC/DR philosophy for some time and has conducted research and development of products, services, and solutions to support BC in companies. In 2004, NEC has also signed a technology transfer agreement with US-based SunGard Availability Services in the area of BC and DR.

SunGard is a pioneering company in the area of BC/DR with outstanding results in supporting BC. It has achieved 100% success in more than 1,500 cases of DR during over 20 years of experience since its establishment in 1979.

NEC has promoted in-house deployment of BC/DR using as

a reference the experience and pioneering know-how of SunGard, developing and systematizing services adapted to Japanese companies.

An overview of the services offered by NEC is illustrated in **Fig. 1**.

## 2 Overview of BC/DR Services Offered by NEC

### 2.1 BC Consulting Services

BC Consulting Services such as business impact analysis to help performing the necessary investments on BC in the most effective manner, and also preparing the Business Continuity Plan (BCP) to enable quick business recovery.

#### (1) Risk Assessment and Facility Review

In addition to analyzing the risks faced by the customer's business environment with respect to disasters, we also inspect the conditions of computer systems and buildings, equipment, and facilities. We evaluate the vulnerability to disasters and point out pre-conditions to consider implementing the next steps of BC.

#### (2) The Business Impact Analysis (BIA)

We analyze the customer's businesses and quantify the loss caused by the stoppage of each business to define orders of

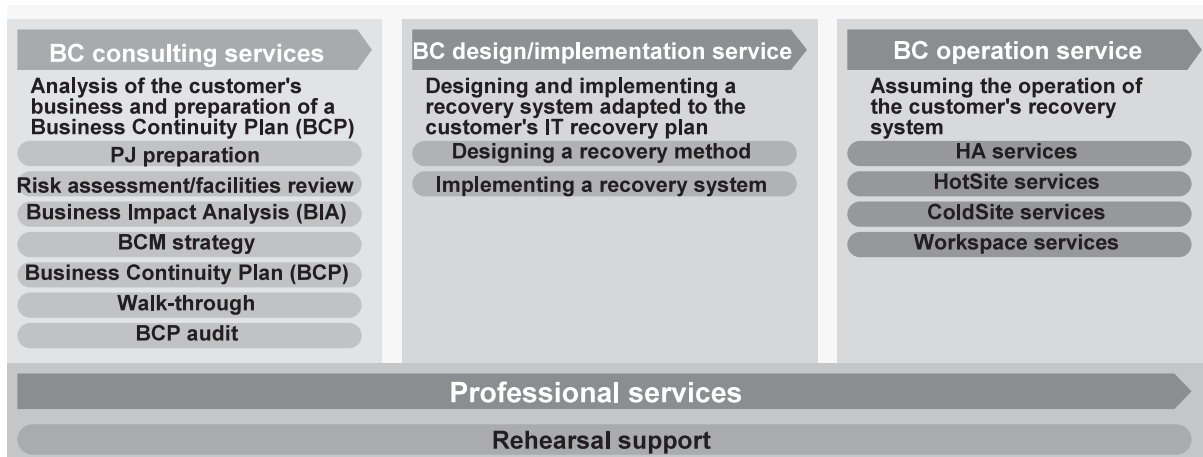


Fig. 1 Overview of services provided by NEC.

priorities for recovery, along with Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO). At the same time, we also identify vulnerability bottlenecks preventing the smooth recovery of businesses.

**(3) The Business Continuity Management (BCM) Strategy**  
Based on the vulnerabilities in terms of business recovery that were pointed out, on the order of priorities, and on recovery targets, we define strategies for recovery of business and information systems. In addition, we compile all the activities necessary to BC into a BC Medium-Term Plan that includes a BCM and a business continuity policy that comprises company-wide BC strategies and philosophies.

**(4) The Business Continuity Plan (BCP)**

We support the preparation of a “Business Continuity Plan (BCP)” that includes a “Business Recovery Plan (BRP)” stipulating the establishment of a disaster recovery office, a communications network and the preparation of job manuals for business recovery, and an “IT Recovery Plan (ITRP)” defining methods and procedures for the recovery of IT systems necessary for the recovery of business, including documented specification of personnel and means of communication between engineers to enable the continuous operation of the systems.

We efficiently support the preparation of BCP based on the know-how obtained from SunGard using several guidelines such as the “Planning Guideline of the Business Continuity Plan” issued by the Central Disaster Prevention Council of the Cabinet Office and also templates which have been thoroughly tested on Japanese companies.

Finally, several consulting services are available such as the “BC Project Plan” to support the customer’s internal BC/DR projects, the “Walk-Through” service that examines details of the BCP currently used by the customer, and the “BC Assessment,”

which evaluates the maturity of BC/DR by the customer.

**2.2 BC Design/Implementation Services**

These services consist of implementing a recovery system to design hardware, software and network structures based on recovery strategies and objectives (RTO and RPO) and on the selection of the recovery method that best fits the customer’s system and satisfies the customer’s BC/DR specifications (recovery level, data transfer method, data capacity, office space restrictions, etc.).

The recovery system can be implemented and evaluated in the customer’s backup center or at NEC’s substitute site BC Center for disasters.

**2.3 BC Operation Services**

The BC Center can be used as a reliable and safe remote substitute site during disasters. Backup systems built at the BC Center are operated by NEC specialized support personnel based on ITIL (Fig. 2). The backup system is switched on during emergencies (DR) and operations are realized according to individual contracts with users.

The BC Center also offers BC/DR support by providing substitute office spaces to be used by the customer’s system engineers and operators, which are necessary for the recovery work based on the backup system.

Moreover, NEC also has data centers spread all over the country equipped with earthquake-proof or quake-absorbing structures, together with reliable anti-fire and security measures. BC sites with backup systems are important for business continuity. In some cases, a simple measure that would reduce considerably the risks of losing data or facing a system breakdown is to transfer the main system to these robust data centers. It is

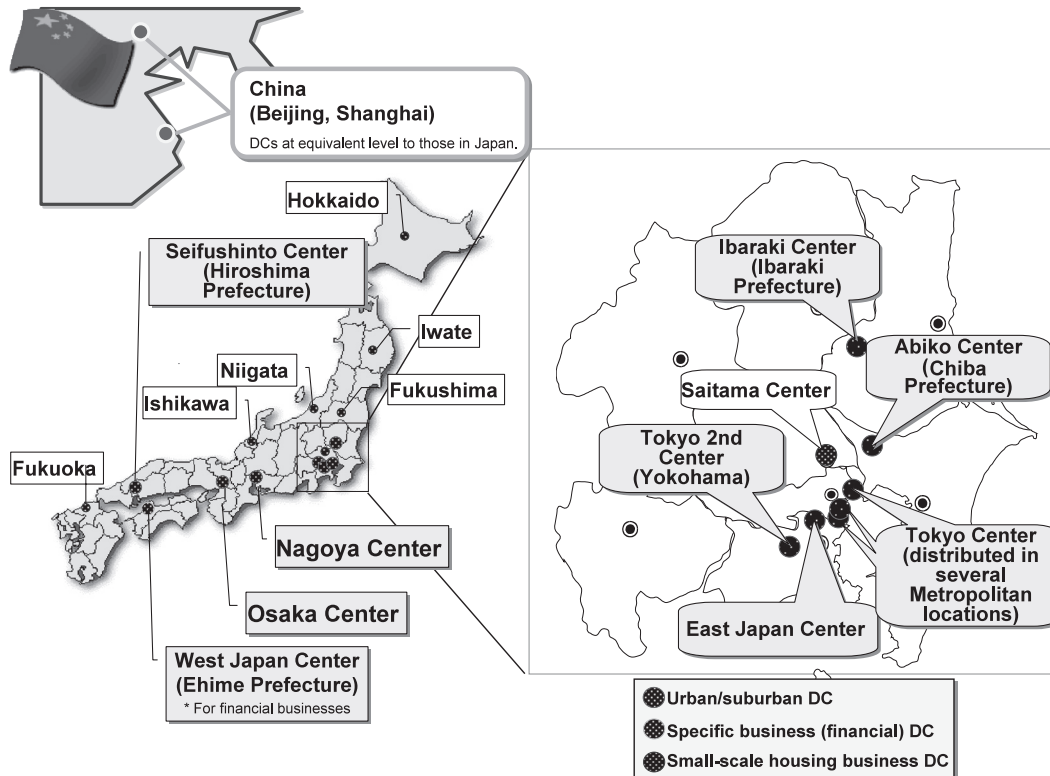


Fig. 2 Regional BC centers.

often the case that after evaluating the customer's main site in terms of vulnerability to disasters during consulting services, we recommend the customer to first transfer the main system to a data center before constructing a substitute system.

## 2.4 Education/Training Services

These services consist of conducting rehearsals (simulating the occurrence of disasters) of system recovery, business recovery and return to normal operation in accordance with the procedures established by BRP and ITRP, during which plans are analyzed in terms of BC.

In order to achieve a better coverage of multiple dangers, rehearsals comprise an "exercise" phase - which consists of a situational training based on scenarios - and a "drill" - which is a recovery training using a real-world DR system.

In the exercises, disaster scenarios are prepared including a few "surprises," that is, unexpected events such as traffic closures preventing circulation up to the backup site. People actually involved in BC are asked to meet in a room to simulate actions during disasters (see **Photo**). In this manner, it is possible to examine plans, find failures, and conduct education to enable quick actions in case of disasters, enhancing the mem-

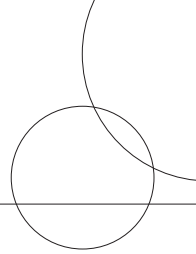
bers' consciousness regarding crisis management.

## 2.5 Other Services

In addition, we also provide several types of package systems such as construction works to implement earthquake-proof or



Photo Aspect of disaster case-study simulation in a meeting room.



quake-absorbing structures in machine rooms and data centers where the customer's production servers and DR systems are installed, disaster information systems to provide means to take first measures and enable information sharing during disasters, as well as database systems to check for someone's safety.

### 3 Characteristics of NEC BC/DR Services

Just constructing a backup system and a BCP does not imply in the full realization of BC/DR. It is necessary to promote the establishment of BC/DR management as a daily practice, with continuous improvements during the PDCA cycle. NEC's BC/DR services are not limited to providing hardware or constructing recovery systems. Our total support services comply with the PDCA cycle and include risk analysis, BC planning/execution, recovery systems operations, and rehearsals.

The main characteristics are listed below.

#### 3.1 Total Support from Planning/Execution to Design, Construction, Operation and Rehearsal

By providing total support not limited to the construction of a recovery system but one that also includes planning and execution of BC/DR, design, implementation, operation and rehearsal, the customer's Business Continuity Management (BCM) is implemented in an effective way, with seamless connection between the services offered during different phases of PDCA.

#### 3.2 SunGard's BC Know-How and NEC's Solutions

NEC has merged the know-how acquired from the leading provider SunGard regarding BC/DR services for disaster recovery with NEC's own technology and know-how in products, solutions and services accumulated in many years.

It is worth noting that crisis management philosophies in the United States and Japan differ in many respects, for instance in the sense of danger caused by earthquakes. For that reason, adaptations had to be done to Japanese circumstances and philosophy regarding crisis management based on references such as NEC's internal BC deployment project.

#### 3.3 Providing Services Combining Optimal Technologies

NEC combines products from several partners and provides highly-reliable "best-of-breed" (multiple solutions combining the best functions of each genre) solutions based on VALUMO platform technologies. Taking advantage of its long system construction experience in the SI business and the leading-edge technologies accumulated through several DR demonstration tests, NEC protects the customer's valuable assets and data using specialized IT services management know-how such as ITIL, ISMS, and Privacy-Mark in extremely robust and secure

data centers.

### 4 Conclusion

NEC has contributed actively as an opinion leader and specialist in the field of BC in groups such as the "Corporate Evaluation/Business Continuity Working Group" of the Central Disaster Prevention Council of the Cabinet Office (where NEC attended as an observer), which has discussed business continuity guidelines, and the BCP International Standardization Study Group of the Japanese Standards Association.

In June 2006, the "Business Continuity Advancement Organization (BCAO)" was established as a non-profit organization (NPO) focused on the dissemination, standardization, and education for BC/DR.

As an entity deeply involved with BC/DR, NEC has taken an active role in the establishment of the NPO above. I assumed a post in the board of directors and we also sent 10 specialists in BC as corporate members. Their activities have already started.

The most important task of BC is to find a realistic solution focusing on the most important businesses taking into consideration limited resources and other restrictions. When it becomes difficult to handle the entire task with the company's own resources, it is important to actively seek support from partners possessing abundant resources and know-how. In addition to becoming a trusted partner in the field of BC/DR, NEC's goal is to actively improve the reliability of the Japanese society as a whole by providing BC/DR services to companies.

NEC will be glad to be selected as your partner.

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