

Business Continuity Guidelines
—Strategies and Responses for
Surviving Critical Incidents—
(March 2023)



Cabinet Office, Government of Japan

Notes on This Revision

In consideration of lessons learned from critical incidents threatening business continuity, the establishment of related institutions, and changes in the economy and society, the “Business Continuity Guidelines” were revised. The table below shows the purpose and background of the establishment and revisions of the guidelines.

Table (1): Purpose and Background of Establishment and Revision of the Business Continuity Guidelines

Date	Purpose	Background
August 2005	To encourage enterprises to draw up a Business Continuity Plan (BCP) in case of disaster	The importance of creating a BCP was noted in the “Basic Recommendation of a Disaster Management Strategy by Utilizing Civil and Market Abilities” (October 2004) which was prepared by the Council Special Board of Inquiry on Enhancing Disaster Management by Utilizing the Private Sector and Markets” (established in September 2003). The first version of the Guidelines was intended to spread the concept of BCP.
November 2009	To make the Guidelines more practical	The “Study Panel on Measures to Facilitate the Establishment of a Business Continuity Plan” conducted a study and revised the Guidelines to include the following: <ol style="list-style-type: none"> 1. Indication of relationship with other guidelines 2. Indication of general applicability to all enterprises and organizations regardless of size, type of industry, or business 3. Indication of the scope of business risks for which business continuity efforts are effective 4. Emphasis on checks and corrective actions to improve and establish the Guidelines 5. Indication of Recovery Level Objective (RLO) which is inseparably linked with Recovery Time Objective (RTO)
August 2013	<ul style="list-style-type: none"> ● To encourage the implementation of Business Continuity Management (BCM) by enterprises even in normal times ● To reflect the lessons learned from disasters, international trends, etc. 	The “Study Panel on Measures to Facilitate the Establishment and Operation of a Business Continuity Plan” conducted a study and revised the Guidelines to include the following: <ol style="list-style-type: none"> 1. Indication of the necessity of implementing BCM even in normal times and improvement of related contents 2. Indication of the importance of including broad responses to risks and consideration of the supply chain, etc., and indication of the necessity of a flexible business continuity strategy for handling such risks 3. Indication of the importance of involvement by the management

April 2021	To promote the implementation of measures to restrict employees from going out in the event of a disaster	Based on the report on evacuation from floods and landslides caused by Typhoon Hagibis in 2019 (March 2020, Central Disaster Management Council, Disaster Management Implementation Committee Working Group on Evacuation from Disasters Caused by Typhoon No. 19 of 2019), a revision was made to encourage enterprises to formulate business continuity plan (BCP) that include measures to restrict employees from going out in the event of a disasters.
March 2023	To respond to changes in the business environment	After discussions at the "Study Panel on Measures to Facilitate the Establishment and Operation of a Business Continuity Plan," the following revisions were made: 1. Regarding measures to ensure safety, security, and health, the introduction of teleworking and the establishment of a system for online decision-making are clearly stated. 2. Information security enhancement is clearly stated.

Introduction

As a result of the Great East Japan Earthquake in March 2011, many enterprises in Japan suffered serious damage from the massive tsunami and earthquake, and faced shortages of electricity, fuel, and so forth. Economic activities were affected not only domestically but also internationally through supply chains. It is important to learn from this disaster and to prepare for other disasters that are likely to occur in the future. Without effective preparation, the Japanese economy and society may face a crisis if disaster strikes. Even in normal times, without effective preparation, there could be a loss of confidence in the Japanese economy, a slump in purchasing and direct investment from overseas, a shift of production bases to overseas, and so on.

Therefore, enterprises in Japan should consider all possible disasters which could hit Japan or overseas, and prepare for the worst conceivable situations. They should constantly develop a business continuity strategy which can effectively handle the damage caused by a disaster, take countermeasures, and improve their efforts. In some past disasters, some enterprises were able to restore normal operations quickly because their Business Continuity Plans or coordination with other companies worked effectively. Therefore, it is important for enterprises to utilize such lessons in order to enhance the capability to continue doing business.

As the business operations and environments of enterprises become increasingly diverse and complicated, there is a risk that various critical incidents other than disasters could suspend production activities and distribution, causing severe impacts on society in Japan and overseas. Therefore, it is necessary to build an economy and society which can be restored smoothly and seamlessly when the contingency happens. Thus, enterprises must improve their business continuity capabilities.

In Japan, good business continuity practices have already been secured to some degree and have been proven to be effective in practice, and some of these practices in Japan are more advanced than in other countries. Based on these experiences, enterprises should further improve their efforts.

The Guidelines show the necessity of implementing good business continuity practices by enterprises in Japan and describe what should be done, in order to facilitate the implementation of Business Continuity Management and hence create and improve Business Continuity Plans.

Enterprises must take measures even in normal times in case they cannot continue important business for some reason. They must know whether their actions are correct, since such actions may determine the success or failure of their business/operation. Therefore, the management should accept responsibility, understand the necessity and advantages of improving business continuity capabilities even in normal times, invest a reasonable amount of time, labor and money, be willing to continue doing business under any adverse conditions, and strive to stay in business. In addition, the management must publicize their efforts inside and outside the enterprise. The right decisions and management leadership are necessary when responding to contingencies. A business continuity initiative is a key task that the management should address. Responses by individual managers alone will be ineffective and the enterprise will be unable to fulfill its social responsibilities.

The Guidelines provide advice to the management in “Chapter 1.4: Requirements for Management” and in “Chapter VIII: Recommendations to the Management and the Economic Community.” We urge the management to read these chapters first.

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Outline of the Guidelines

<Targets of the Guidelines>

The Guidelines are intended mainly for private enterprises, including all enterprises¹ regardless of type of industry, business or size.²

<Purpose of the Guidelines>

The Guidelines describe the outline, necessity, effectiveness, implementation methods, establishment methods, points to remember, etc. of good practice in business continuity, or Business Continuity Management (BCM) including Business Continuity Plans (BCP), in order to encourage enterprises in Japan to ensure good practice in business continuity, thereby improving the business continuity capabilities of Japan as a whole. Both the government and the economic community as a whole strongly expect good practice in business continuity to become widespread. Therefore, enterprises must actively consider this matter.

An analysis of the responses following the Great East Japan Earthquake and the great flood in Thailand in 2011 revealed that some Japanese enterprises had established world-leading BCM. However, many enterprises have not established sufficiently good practice in business continuity. Therefore, the Guidelines aim to help such enterprises and industries as a whole to improve their business continuity capabilities by encouraging them either to launch such efforts or to review and improve their efforts, and to encourage enterprises to collaboration with each other inside and outside their regions in consideration of the importance of supply chains. These efforts are expected to improve the value of enterprises, organizations and industries.³

<Incidents covered by the Guidelines>

The BCM described in the Guidelines covers natural disasters⁴ which disrupt the business (especially the supply of products and services) of enterprises. However, the BCM can also cover any incidents which may suspend business operations such as large-scale accidents, communicable disease pandemics, terrorist acts and disruption of supply chains and cyber attacks.⁵

<Status of the Guidelines>

The Guidelines take into account the conditions of BCM in Japan and conform in principle with the concepts of international standards and good practices in foreign countries. Therefore, the promotion of good practice in line with the Guidelines will effectively ensure international consistency of BCM.⁶

The Guidelines include many recommendations and examples, but enterprises are encouraged to take only those measures that suit them. It is important for enterprises to develop their own ideas.⁷

¹ Both for-profit and non-profit organizations.

² BCM is effective for organizations, including central and local governments. For details of the contents of BCM for specific sectors, please refer to the specific guidebook.

³ In order for enterprises to make effective business continuity efforts, the central government recognizes the need of providing timely and appropriate information, temporary special responses according to situations, and the collaboration in BCM, etc., in addition to promoting the collaboration with local governments.

⁴ The Basic Act on Disaster Management defines a disaster as "damage caused by abnormal natural phenomena such as strong winds, tornadoes, heavy rain, heavy snowfall, floods, cliff collapses, mudslides, high tides, earthquakes, tsunamis, volcanic eruptions, landslides, and other phenomena similar to these in terms of the extent of the damage they cause, as specified by government ordinance."

⁵ It is debatable whether or not the risks of demand fluctuations, depletion of assets, etc. due to changes in exchange rates or economic slowdown should be covered by BCM. In general, however, these risks should not be covered by BCM. However, if demand is expected to fluctuate due to some incident, it will be effective to implement BCM.

⁶ However, the Guidelines do not meet the necessary conditions for acquiring ISO22301 certification, for example.

⁷ If an enterprise aims to acquire a certification or authorization relating to BCM, they should check the mandatory requirements of such system of certification, etc.

<Composition of the Guidelines>

The following table shows the composition of the Guidelines.

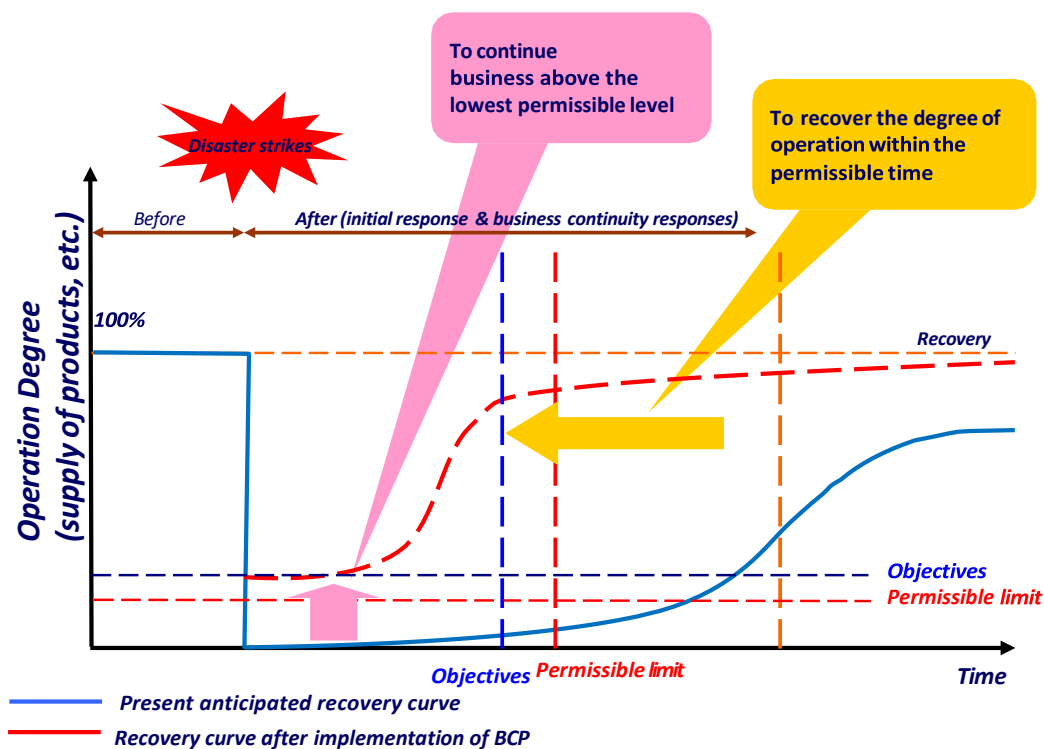
Table (2): Composition of The Guidelines

Composition	Chapter	Outline
Introduction	Outline of These Guidelines	Explanations of the outline (targets, purpose, status, etc.) of the Guidelines as a whole
Text	I Necessity and Outline of Good Practice in Business Continuity	Basic matters of good practice in business continuity and the necessity and advantages of promoting good practice
	II Establishment of Policy	Establishment of the basic policy of Business Continuity Management (BCM) and creation of a system to establish and implement BCM
	III Analysis and Examination	“Business impact analysis” by which critical operations to be continued in the event of an incident and whether or not such critical operations should be recovered are analyzed, and “risk analysis and assessment” by which such risks are identified for which measures should be taken on a priority basis
	IV Examination and Finalization of Business Continuity Strategies and Measures	Business continuity strategy for restoration by the recovery time objective and continuing critical operations
	V Establishment of Plans	Establishment and documentation of a plan under BCM
	VI Proactive Measures and Implementation of Education and Training	Proactive measures based on a plan, and implementation of education and training
	VII Review and Improvement	Review and improvement of BCM
	VIII Recommendations to the Management and the Economic Community	Recommendations on the importance of promoting good practice in business continuity and matters to consider in promoting good practice, to the management and the economic community
Appendix	1. Glossary	Explanations of terms used in the Guidelines
	2. Reference Books	List of references used in establishing and revising the Guidelines
Exhibit	Checklist	Checklist used for checking the status of achieving good practice in business continuity

I Necessity and Outline of Good Practice in Business Continuity

1.1 Outline of Business Continuity Management

A Business Continuity Plan (BCP) is a plan describing the policy, systems, procedures, etc. by which enterprises can avoid suspension of their critical business or can recover the critical business quickly if it is interrupted, even when contingencies arise, including natural disasters such as major earthquakes, communicable disease pandemics, terrorist acts, serious accidents, disruption of supply chains and abrupt changes in business environment, or they can recover business quickly if their business is interrupted.



⁸ This illustration mainly presumes risks (earthquakes, floods, terrorist acts, etc.) which abruptly cause damage to enterprises. For example, if a large-scale disaster occurs, demand for certain products and services will increase compared with normal times, or demand for one company's products and services will temporarily increase if other companies in the same business are hit by the disaster. Therefore, the operating rate may exceed 100% in response to such increase in demand.

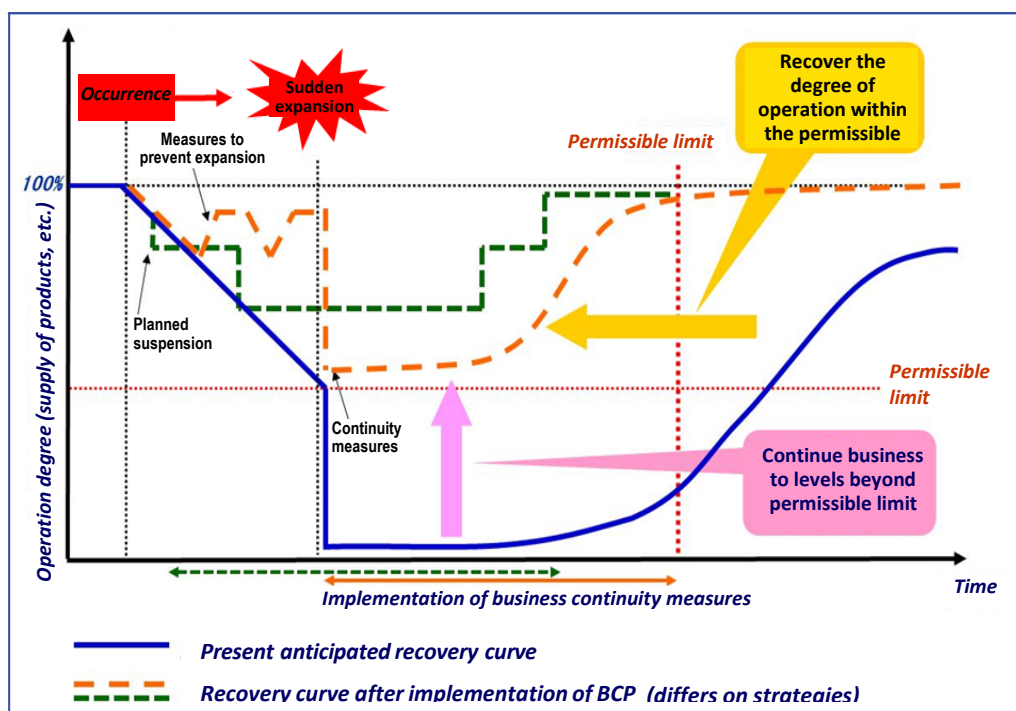


Figure 1.1-2 Concept of Business Continuity Plan:
Risks causing gradual and long-term continuous damage⁹

Management activities in normal times such as the establishment, maintenance and revision of a BCP, securing of budget and resources for ensuring business continuity, implementation of proactive measures, education and training for promoting good practice, inspections and continual improvement are referred to as Business Continuity Management (BCM) and are treated as strategic management activities.¹⁰ However, the management must determine the details of BCM according to their business activities and corporate size. Since BCM is possible without making large investments, all enterprises, including those without large financial or human resources, should introduce BCM. Although the economic community has high expectations, enterprises should not hesitate to introduce BCM by trying to create a perfect system from the beginning; they should implement good practice first and then gradually improve their business continuity capabilities by making continual improvements thereafter.

⁹ This image shows the gradual and long-term continuous risk relating to infectious disease spreading.

¹⁰ The contents of BCM in The Guidelines were generally included in the broad definition of “Business Continuity Plan (BCP)” in previous Guidelines. Recently, however, BCP is often used to mean “a contingency plan to deal with a contingency” in a narrow sense. In the present Guidelines, therefore, the term BCM is used for the sake of consistency.

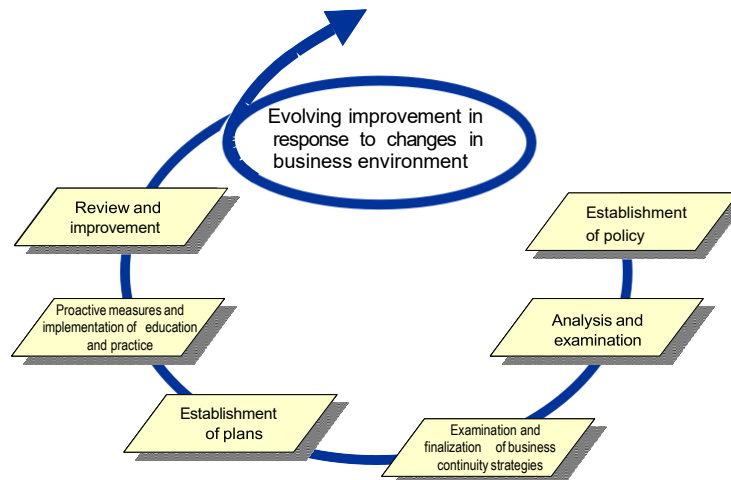


Figure 1.1-2 Flow of Good Practice in Business Continuity

BCM represents not a simple plan but continual efforts. Therefore, enterprises should address BCM on a systematic ongoing basis, by using management systems including the PDCA cycle.¹¹ If an enterprise has already introduced such systems, they should introduce BCM in harmony with such systems.

The following three points are important for BCM; if one is weak, its effect will be limited even if the other points are strong:

- System for continuing business under unexpected circumstances
- Degree of awareness of BCP and BCM in an enterprise
- System for assessing and improving a business continuity system and capability

1.2 Relationship between Enterprises' Conventional Disaster Management Activities and BCM

As indicated in the following table, an enterprise's BCM is closely related with conventional disaster management activities, but the core concepts and approaches of BCM are different from those of disaster management activities. In the case of BCM, a business judgment is needed to select critical business and operations which should be carried out on a priority basis and which operations must be recovered to what level, because if a critical event occurs, management resources will be limited. BCM is significantly different from conventional disaster management activities in this regard, so if BCM is regarded as a simple extension of such conventional activities, it may not be effective.

¹¹ One of these is a management system using the PDCA cycle of the ISO. Under the Business Continuity Management System (BCMS), one means is to use an ISO certification system, etc. However, the Guidelines are not intended to encourage certification systems, in particular third-party certification systems.

Table 1.2-1 Comparison of Enterprises' Conventional Disaster Management Activities and BCM¹²

	Enterprises' Conventional Disaster Management Activities	Enterprises' Business Continuity Management
Main purposes	<ul style="list-style-type: none"> ● Securing safety of persons ● Reduction of property damage 	<ul style="list-style-type: none"> ● Securing safety of persons, and continuation or early recovery of critical operations that should be continued or restored on a priority basis
Events to be covered	<ul style="list-style-type: none"> ● Anticipated disaster in the region of a business base 	<ul style="list-style-type: none"> ● All incidents which could interrupt an enterprise's business
Important matters to be emphasized	<ul style="list-style-type: none"> ● Minimize the following: <ul style="list-style-type: none"> ➢ Number of casualties ➢ Amount of damage ● Confirm the safety of employees, etc., and rescue and support affected persons ● Recover affected sites as soon as possible 	<ul style="list-style-type: none"> ● Minimize the number of casualties and amount of damage, confirm the safety of employees, etc., rescue and support affected persons, and do the following: <ul style="list-style-type: none"> ➢ Achieve the recovery time objective and the recovery level objective for critical operations ➢ Keep the impacts on management and stakeholders within the permissible range ➢ Ensure revenue generation and survive as an enterprise
Scope of examination of activities and measures	<ul style="list-style-type: none"> ● Each site of an enterprise: <ul style="list-style-type: none"> ➢ Head office building ➢ Plant ➢ Data center, etc. 	<ul style="list-style-type: none"> ● Company-wide (including all sites) ● Parties in the supply chains, etc. on which an enterprise relies: <ul style="list-style-type: none"> ➢ Subcontractors ➢ Suppliers ➢ Customers, etc.
Units involved in efforts	<ul style="list-style-type: none"> ● Efforts are made by specific divisions in charge of disaster management, including the disaster management division, general affairs division and facility division. 	<ul style="list-style-type: none"> ● Efforts are jointly made by the management, each business division, procurement and sales divisions, and support divisions (corporate planning, public affairs, finance, general affairs, information systems, etc.).
Types of strategies and measures to be examined	<ul style="list-style-type: none"> ● Measures for reducing damage to sites and for recovering sites after a disaster as soon as possible (earthquake-resistant improvements, stockpiles, prevention of secondary disasters, rescue, recovery works, etc.) 	<ul style="list-style-type: none"> ● Site substitution strategy (securing alternative sites, securing redundant sites and facilities, implementing OEM, information backup, etc.) ● Site recovery strategy (including many measures in common with those for sites of disaster management activities)

¹² This table was prepared by referring to comparison tables, etc. in the "standard text" of the Business Continuity Advancement Organization.

In the case of disaster management activities, measures for reducing damage from a disaster are examined by each site (business sites, etc.). Disaster management activities will remain extremely important for business management in the future. Since some aspects of disaster management measures are the same as those of BCM (in particular, site recovery strategy), enterprises should promote BCM in parallel with disaster management measures. To facilitate such efforts, the central government will estimate and publicize the damage from a disaster of particular concern, the estimated time to recover infrastructure, etc., and continue to make efforts, including investing in infrastructure measures. The central government will also ask local governments and social infrastructure operators, including designated public institutions, to take similar actions.

1.3 Necessity of Business Continuity Management

Even if critical incidents occur, customers and all stakeholders hope that enterprises will continue their critical business or recover as soon as possible. Therefore, enterprises should fully understand the needs and expectations of stakeholders and actively adopt BCM in their management strategy.

There have been many natural disasters like large-scale earthquakes that caused enormous damage around the world, forcing enterprises to suspend operations. History shows that even if an enterprise managed to avoid closing, it takes a long time to recover and it is not easy to regain the customers who left during the disaster.

Recently, enterprises have promoted the division of work and outsourcing to improve productivity. Therefore, if certain enterprises involved in the supply of raw materials, the production of parts, assembly, transportation, sales, etc. suffer in a disaster, the whole supply chain may fail and affect not only domestic but also international enterprises.¹³

Therefore, it is increasingly important for enterprises to introduce BCM so that they can continue their critical business or recover operations as soon as possible under any conditions and thereby survive and fulfill their supply responsibilities, etc. to customers and society as a whole.¹⁴

BCM is also indispensable from the viewpoint of the responsibilities of enterprises in society and the local community. In Japan's "Basic Disaster Management Plan" under the Disaster Countermeasure Basic Act, one of the roles of enterprises is described as follows: "Enterprises should make efforts to establish and operate a business continuity plan to continue their critical operations." In the Disaster Countermeasure Basic Act amended in FY2013, the following provision concerning the obligations of business operators was added: "Business operators engaged in the business of supplying or disaster management shall in principle strive to continue to conduct such business even after a disaster, and cooperate with disaster management measures which are taken by the central and local governments regarding their business operations." (Article 7, paragraph 2)¹⁵

¹³ After the Great East Japan Earthquake, domestic impacts spread to other countries. Conversely, the impact of the floods in Thailand spread to Japan. In view of the importance of supply chains, BCM should be introduced.

¹⁴ In addition to supply responsibilities, enterprises must comply with laws and local regulations (holding of general shareholders' meetings, and deadlines for submitting tax returns, securities reports, side effects reports, etc.) and fulfill their obligations to pay suppliers, employees, etc.

¹⁵ The Act on Special Measures concerning Measures against a New Influenza Virus and the Action Plan for Measures against a New Influenza Virus, for example, require that designated public institutions establish an operational plan concerning the contents, implementation method, and system of measures to combat a new influenza virus and coordination with related organs, and implement the plan during a new influenza virus epidemic. The Act and the Action Plan also require that registered business operators strive to provide ongoing medical services and help stabilize people's lives and the national economy.

Even in normal times, BCM can raise the competitiveness of enterprises. Customers highly evaluate enterprises' BCM efforts because they expect products and services to be supplied by such enterprises. As a result, such enterprises can procure new customers or expand business with existing customers, and investors will have greater confidence in such enterprises.¹⁶

1.4 Requirements for Management

As mentioned above, the management¹⁷ of enterprises has the obligation to ensure good practice in business continuity. Therefore, the management must exercise leadership both in normal times and after an incident, and take the initiative in the following:

- Understand the necessity and advantages of BCM, the necessity of an appropriate amount of time, labor and investment, and then decide to introduce BCM and have it implemented as a key responsibility of enterprises.
- Based on their management philosophy (*raison d'être*, etc.) and vision, establish a basic policy for BCM which is linked to management, allocate management resources, establish strategies, develop plans including BCP, make appropriate judgments on the implementation, coordination, improvement, etc. of measures, and ensure the measures are implemented.
- Actively participate in discussions, coordination, improvement, etc. concerning BCM.
- Seek stakeholders' understanding of BCM.
- Strive to increase the confidence of stakeholders, including customers, who are important for enterprises by periodically providing information on BCM and business continuity capability to them.¹⁸
- Aim to increase competitiveness and expand transactions, profits, etc. by building a system for improving corporate value through BCM.
- When invoking a BCP, appropriately select strategies and measures. If an unexpected incident occurs, make judgments flexibly based on the existing BCP, and give instructions on responses.

¹⁶ In addition, there are the following advantages:

- Maintenance of employment for enterprises and the local community
- Enterprises can assist each other if the supply capacity of other companies in the same business decreases.
- Enterprises can benefit from recovery or reconstruction demand.

¹⁷ In this text, top-ranking persons or groups who are responsible for the management or operation of enterprises are referred to as "the management."

¹⁸ An outline of good practice should be actively disclosed in securities reports, business reports, etc.

1.5 Whole Process of Business Continuity Management

Good practice in BCM is based on the processes shown in the figure below. Each process is explained in the subsequent chapters.

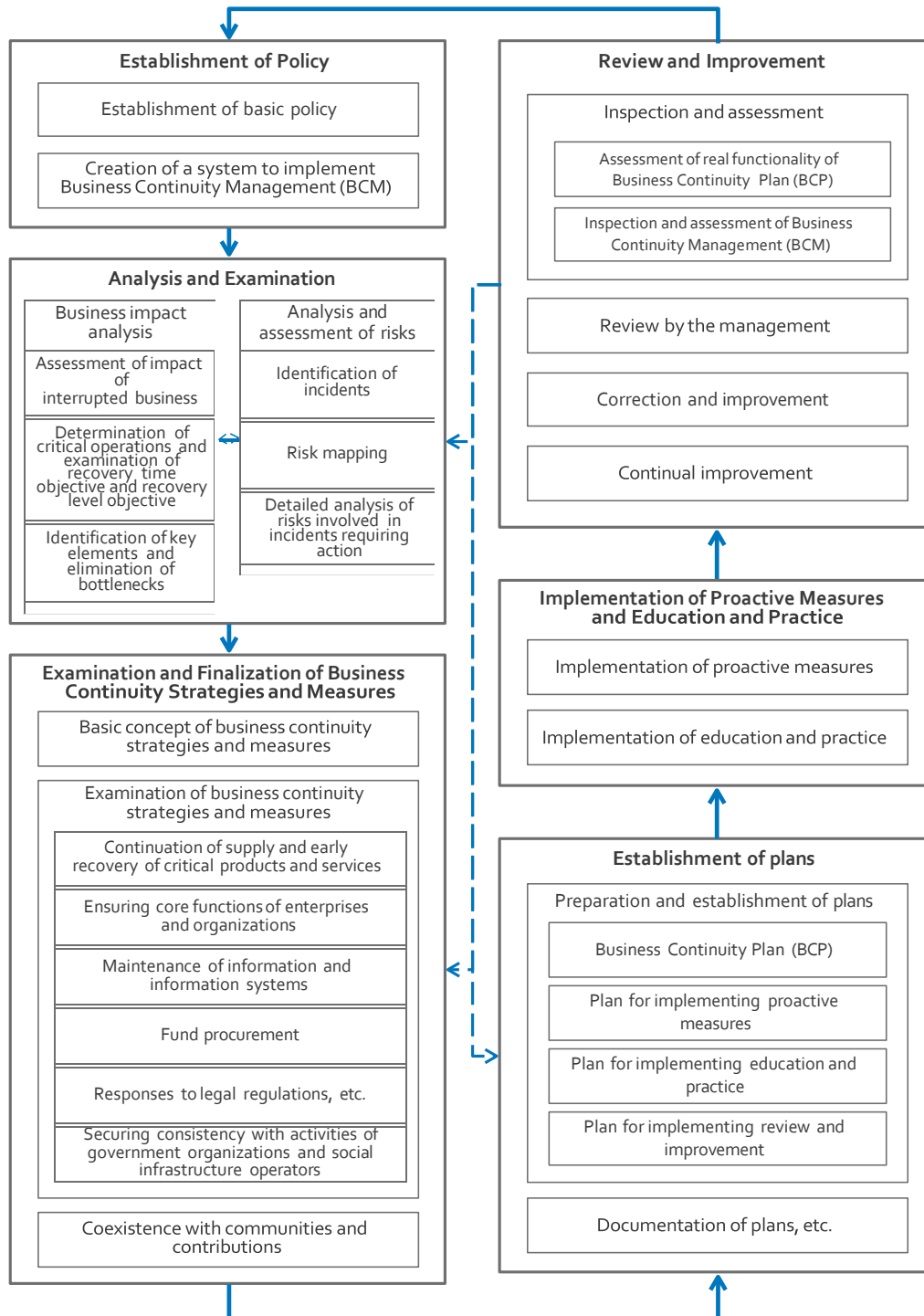


Figure 1.5-1 Process of Business Continuity Management¹⁹

¹⁹ In the figure, a solid arrow flows from “Review and Improvement” to “Establishment of Policy.” Dashed arrows represent actual cases because there are many such cases in practice.

II Establishment of Policy

2.1 Establishment of Basic Policy

Before implementing BCM, the management must fully understand their enterprise's business and the surrounding environment, and clarify their responsibilities and matters critical to the business. In particular, the management should first summarize the demands and requirements of all stakeholders such as business partners and society in general for their enterprise's business in light of the management policy and business strategy.

Based on the foregoing, the management needs to establish a basic policy²⁰ indicating their enterprise's concept of business continuity. The management should also determine the purpose of business continuity and the objectives to be achieved by BCM, and clarify the types of business and the offices which are covered by BCM. These are the fundamentals of BCM, so a resolution of the Board of Directors or the management council should be obtained.

In BCM, the top priority should be placed on securing the safety of customers, officers and employees of the enterprise, affiliates, temporary help companies, subcontractors, etc. and on preventing secondary disasters at the workplace. The management should carefully consider contributions to and coexistence with the local community where possible (refer to Chapter 4.3).

2.2 Creation of a System for Implementing Business Continuity Management

Before implementing BCM, the management must create a system for implementing BCM for conducting analysis, examination, preparation of BCP, etc. by designating persons responsible for BCM and members of a BCM secretariat²¹, and must establish a company-wide system,^{22 23} including the creation of a project team, etc. comprising staffs of all divisions concerned. Even after activities have progressed and a BCP, etc. are established, it is necessary to maintain BCM by keeping these systems and transforming them into operation systems²⁴ for implementing proactive measures and education/training and by continually reviewing and improving them. The management should have general responsibility and accountability for these systems.

²⁰ For example, the basic policy may include "top priority on human life," "fulfilling supply responsibilities to customers," and if there are specific social responsibilities, "fulfilling social responsibilities without fail."

²¹ An organization that establishes and operates the BCM system under the direction of the BCM manager.

²² Each division needs to designate the authorized persons having responsibilities and authority for BCM. Existing organizations may be used as overall systems. Such persons should be favorably evaluated for engaging in BCM within an enterprise, organization or division.

²³ When establishing the system, it is advisable to obtain the knowledge and expertise of external experts in the fields that will be influenced as necessary.

²⁴ The authorized persons having responsibilities and authority for implementing proactive measures, education/training, inspections, audits, correction/improvement, etc. should be secured. It is important to secure a certain number of such persons, although the number of full-time persons may be reduced after the system is introduced, and the persons who hold concurrent positions may be sufficient (refer to Chapter 6.1).

III Analysis and Examination

3.1 Business Impact Analysis

If the facilities of enterprises suffer heavy damage or a supply chain for critical business is interrupted due to a critical incident, it may be difficult to continue all of the normal businesses and operations; indispensable and critical operations must be continued or recovered as soon as possible according to priorities. Therefore, enterprises must carefully select these critical operations by conducting a Business Impact Analysis (BIA), examine the recovery time objective for such operations, and clarify management resources necessary for achieving the objective.²⁵

3.1.1 Assessment of Impact of Business Interruption

If the business of an enterprise is interrupted regardless of the reason, its impact and changes of the impact should be assessed in chronological order. This analysis must be conducted “regardless of the reason” because the important point for customers and customers is “whether the business is interrupted or not,” irrespective of the reason for any interruption.²⁶

In particular, an enterprise should assess the impact of an interruption (or significant deterioration) of the supply of products or services according to Table 3.1.1-1, in chronological order, quantify matters where possible, identify critical products and services for the enterprise, and examine the duration of interruption (or significant deterioration) of supply which each of such products and services can endure.²⁷

Table 3.1.1-1 Point to Consider when Assessing the Impact of a Business Interruption (Example)

Considerations when Assessing the Impact
<ul style="list-style-type: none">● Impact on profit, sales and market share● Impact on financing● Impact on customers, including the business continuity of customers, and impact on continuing to do business with customers● Impact on the employment and welfare of employees● Impact of violations of laws and regulations, regulations of local governments, contracts, service level agreement (SLA), etc.²⁸● Impact on the social credibility of an enterprise● Impact on society and local communities (maintenance of social functions, etc.)

²⁵ For this purpose, information may be collected through questionnaire and interview surveys.

²⁶ Except in the case where customers also suffer from a disaster and their operations are interrupted, or in the case where customers do not suffer from a disaster but cannot immediately resume operations due to the impact of a wide-area disaster, customers may ask for supply regardless of the reason or type of incident. Reasons for business interruption are mainly discussed in Chapter 3.2 “Analysis and Assessment of Risks.”

²⁷ A simplified quantitative analysis, which uses daily sales and volume of clerical works handled, might achieve the purpose. For matters that are difficult to quantify, an evaluation may be based on the scale of impact on management. In a simplified analysis, if critical operations, recovery time objective, etc. can be grasped intuitively, such data may be used. However, if the degree of impact takes too long to evaluate, such efforts will be meaningless because the details will have changed in the meantime.

²⁸ For example, contracts include compensation, etc. for delayed supply; and laws and regulations include deadlines for holding general shareholders’ meetings, deadlines for submitting tax returns, deadlines for submitting side-effect reports by drug companies, etc.

3.1.2 Determination of Critical Operations and Examination of Recovery Time Objective/Recovery Level Objective

Next, based on the results of the Business Impact Analysis (BIA), an enterprise should identify critical business which should be continued or restored on a priority basis.

Furthermore, with respect to operations (critical operations) that are necessary for the critical business,²⁹ an enterprise needs to determine the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) and then prioritize critical operations.³⁰

In particular, for each critical operation, an enterprise should estimate the “permissible time” for which an interruption (or significant deterioration) is permitted and the “lowest permissible level”³¹ based on the chronological Business Impact Analysis (BIA), and then establish a Recovery Time Objective (RTO) which is earlier than the permissible time and a Recovery Level Objective (RLO) which is higher than the lowest permissible level.^{32, 33, 34} However, both RTO and RLO in this stage are merely references because their feasibility has not yet been examined. Strategies and measures for achieving these objectives will finally be determined based on the judgment of the management only after the feasibility of strategies and measures in Chapter IV has been assessed.³⁵

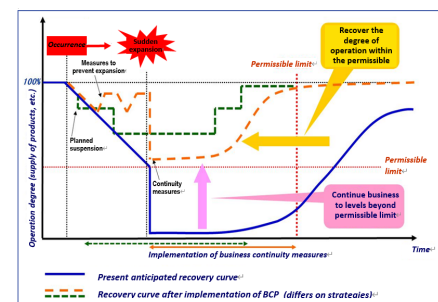
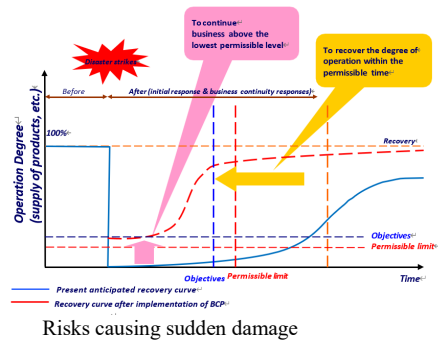


Figure 3.1.2-1 Concept of Business Continuity Plan (BCP) (Repetition)

²⁹ For operations determined not to be critical, the recovery time should be examined only after estimating the recovery time of critical operations. In some cases, however, recovery may be postponed, or going out of business or shifting to a new business may be examined (refer to footnote 45).

³⁰ Recovery Time Objective (RTO) and Recovery Level Objective (RLO) should not be simple objectives but should be achievable by taking measures. As indicated in Chapter 4.1, the management should officially determine a Recovery Time Objective (RTO) and a Recovery Level Objective (RLO) that are feasible and can be explained externally, while also determining the business continuity strategy and measures to be taken based thereon.

³¹ Strictly speaking, these permissible limits may change depending on the seriousness of incidents and the state of damage to infrastructure and customers. For example, the permissible time in case an enterprise suffers a fire may differ from that in case customers and customers also suffer a wide-area disaster at the same time as the enterprise. In many cases, only a general estimation can be made. Therefore, the Guidelines recommend that a general estimation should be made, then reviewed later if necessary. In the case of a wide-area disaster, however, the demands of customers and customers in the affected area will greatly differ from those in non-affected areas, and therefore a proper response to non-affected areas should be made.

³² If these objectives far exceed permissible limits, the cost of measures for achieving them (described in Chapter 4.2) will be enormous and a reexamination may be necessary.

³³ A combination from among multiple Recovery Times Objectives (RTOs) and graded Recovery Level Objectives (RLOs) at various times may be accepted.

³⁴ Some enterprises find it difficult to determine critical operations and their Recovery Time Objective (RTO). However, they should try to determine them. For example, they can examine whether their business can be divided into multiple customers, and then handle supplying important customers as a critical operation. In addition, the Recovery Time Objective (RTO) may be examined by generally assuming recovery times for infrastructure, lifelines, suppliers, customers, etc.

³⁵ The Recovery Time Objective (RTO) and Recovery Level Objective (RLO), which are finalized by an enterprise and will be explained externally, are a kind of commitment and should be achievable. Therefore, these should be determined based on the management's decision only after confirming their feasibility.

3.1.3 Identification of Key Elements and Bottlenecks

Next, key elements indispensable for implementing critical operations (management resources)³⁶ are identified. Basically, it is necessary to identify all key elements without omission. In the case of the manufacturing industry, the workload may be enormous. However, if key elements are not all identified properly, then when examining measures for securing important elements within the required time as mentioned in Chapter IV, other key elements cannot be secured and the measures will be ineffective.

Of these key elements, those elements that cannot speed up the recovery of critical operations or raise the level of recovery of critical operations unless the time necessary for securing the necessary amount of elements is shortened are identified as “bottlenecks.”³⁷ The ordinary method is to predict, at first, the damage (including the delay in time necessary for securing elements) to key elements caused by the incident under the current conditions (before the implementation of strategies and measures) in Chapter 3.2 “Analysis and Assessment of Risks,”³⁸ and then to estimate the “currently possible recovery time” and “currently possible recovery level” based on the foregoing. Then, analyses and examinations are made to identify bottlenecks that require improvement measures.³⁹

In many cases, however, the “currently possible recovery time” and “currently possible recovery level” fail to achieve the proposed Recovery Time Objective (RTO) and Recovery Level Objective (RLO) which are determined based on the needs of customers, etc. in Chapter 3.1.2. Therefore, to resolve the differences in time and level, business continuity strategies and measures for achieving such strategies as mentioned in Chapter IV will be studied to reduce the damage to, or quickly restore, the key elements, mainly bottleneck elements.⁴⁰

3.2 Analysis and Assessment of Risks

In parallel with the Business Impact Analysis (BIA) in Chapter 3.1, an enterprise should analyze and assess risks in order to identify risks (kinds, etc. of incidents) that should be tackled on a priority basis.

The purpose of BCM is to continue critical operations even if an enterprise faces a critical incident, so the Business Impact Analysis (BIA) must be conducted regardless of the type of incident. When addressing BCM in practice, it is necessary to understand risks arising from incidents surrounding enterprises and to select the kinds of incidents which should be tackled on a priority basis and the degree of damage (in the case of an earthquake, the predicted seismic intensity). In particular, when examining measures, a process to predict individual risks arising from anticipated incidents⁴¹ will be necessary.

³⁶ Key elements include key people, sites such as offices and plants, processes, machinery, dies, tools, packing, raw materials and parts, services, lifelines, physical distribution, data, systems and funds.

³⁷ These are identified as critical paths with the longest recovery time and then are improved.

³⁸ These works are included not in the business impact analysis but in the analysis and assessment of risks. Therefore, these two types of analyses and examinations should be conducted in parallel.

³⁹ Identifying key elements may involve an enormous amount of work if a detailed listing is made. One way of reducing such workload is to directly identify elements which may be bottlenecks for achieving the Recovery Time Objective (RTO) and Recovery Level Objective (RLO). As mentioned in the Guidelines, care is required because key elements as bottlenecks may be overlooked.

⁴⁰ Note that eliminating such bottlenecks may cause other bottlenecks to appear. Therefore, it should be considered in advance that measures will need to be taken for such new bottlenecks in the future.

⁴¹ These risks are varied, and can be classified as follows, for example:

- (1) Risks of large disasters, including earthquake: Since these risks cause enormous damage to many management resources, this approach can be used for other risks in which similar damage may be predicted. It is also necessary to consider the damage to customers, infrastructure and lifelines. Therefore, analysis and assessment are difficult.
- (2) Risks of disasters, including fire, in which only one enterprise suffers: Since customers are not affected by the disaster, the permissible interruption time is comparatively short. As customers and lifelines are not affected, analysis and assessment are not difficult.
- (3) Risk of gradual occurrence, such as the spread of infectious diseases: Since the impact will be gradual and long-term, measures to maintain the operation level will be important. Maintaining and securing human resources may become a bottleneck. In order to prevent the damage from spreading, it may be necessary to restrict operations and attendance at work.

When conducting this examination, it is important to understand that the same strategies and measures should be effective for various kinds of incidents, if possible. Then, enterprises should aim to increase the kinds of incidents which are anticipated and tackled, or to expand the degree of damage in the continual improvement of BCM. If an enterprise is satisfied with BCM for only one incident and postpones trying to cover other incidents, it will be difficult to fully utilize the potential of BCM.

The analysis and assessment of risks⁴² should be conducted in the following steps.

(1) Identification of incidents

Incidents which may interrupt the business of an enterprise are identified; all possible incidents which may occur should be considered.⁴³

(2) Risk mapping

For the incidents identified above, the possibility of occurrence and their degree of impact are assessed quantitatively and qualitatively, the kinds of incidents which should be tackled on a priority basis are identified, and such incidents are prioritized.⁴⁴

(3) Detailed analysis of risks arising from incidents which should be tackled

For risks arising from incidents that should be tackled on a priority basis in (2) above, an enterprise should predict the damage, etc. to their management resources, infrastructure, lifelines, customers, etc. This practice is usually done for critical operations selected in a Business Impact Analysis (BIA) in Chapter 3.1. In particular, what damage is caused by identified incidents to key elements of the critical operations identified in Chapter 3.1.3 at present (or before the implementation of measures) should be examined. In general, an enterprise should then estimate the currently required time for securing such key elements, the time when such critical operations can be recovered under current conditions (currently possible recovery time), and the level of operations which can be continued or recovered (currently possible recovery level).^{45,46,47}

As mentioned above, the procedures for analyzing and assessing risks and for Business Impact Analysis (BIA) are often repeated in cycles.

⁴² “Risk Management—Principles and Guidelines (JISQ31000)” should be used as a standard method of risk management.

⁴³ If there is a possibility of occurrence, incidents which may exceed the response potential of an enterprise should be covered. If an incident causes another incident in a chain reaction, such incidents should be covered, if necessary.

⁴⁴ Since incidents having an enormous impact at the time of occurrence may seriously affect business continuity or threaten the survival of an enterprise, such incidents should be treated as “incidents which should be tackled” based on management judgment, even if the likelihood of occurrence is quite low.

⁴⁵ Damage prediction, hazard maps, etc. which are published by central and local governments may be used.

⁴⁶ Even if detailed damages are predicted, it must be noted when examining strategies and measures that unanticipated incidents may occur in the future (this is one of the lessons of the Great East Japan Earthquake).

⁴⁷ Enterprises expanding overseas should take into consideration that there may be effects on the organizational operations (e.g., personnel transfers) and business operations (operations of local offices, factories, etc.) of their bases.

IV Examination and Finalization of Business Continuity Strategies and Measures

For each critical operation, the management should examine and determine a business continuity strategy and measures for achieving the strategy to attain the proposed Recovery Time Objective (RTO) and Recovery Level Objective (RLO) that meet the needs of customers, etc. as mentioned in Chapter 3.1.2. Since the business continuity strategy is an important decision for an enterprise, it should ensure that the strategy is fully aligned with their management philosophy and vision and with management as a whole.

4.1 Basic Concept of Business Continuity Strategies and Measures

Since the purpose of examining a business continuity strategy is to achieve the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) for each critical operation necessary for the important business, it is necessary to examine how to secure elements that are indispensable to critical operations, in particular bottleneck elements. In this approach, the following two main perspectives are important. The first is how to prevent, reduce and restore predicted damage, while the second is how to secure alternative elements if certain elements cannot be used or obtained. In the case of sites, the first perspective requires a “site recovery strategy,” while the second requires a “site substitution strategy.”⁴⁸

Note that a business continuity strategy is examined in view of incidents which should be tackled on a priority basis, while the aim of BCM is to “continue critical operations even if an enterprise faces a critical incident.”⁴⁹ Therefore, it is advisable to examine measures for the situation faced by an enterprise not in view of incidents as causes (for example, an epicentral earthquake) but in view of incidents as outcomes (or impacts; for example, a particular site of an enterprise cannot be used).⁵⁰ Thus, a substitution strategy that aims to secure an alternative for each key element is likely to be effective for a variety of incidents. In BCM, therefore, not only site recovery strategies, etc. but also substitution strategies should always be examined.

For example, if an enterprise secures an alternative site according to a substitution strategy, the alternative site can be used for various incidents. This measure is highly effective for risks as a whole. However, a substitution strategy has many problems. For example, it is usually difficult to establish multiple sites having the same production capacity as the current site in view of the cost in normal times and profitability. Therefore, it is important to develop easy-to-achieve methods, such as deciding only the location of an alternative site without making any capital investment, and only to conduct training on setting up the site. Another approach is for companies in the same business to agree on mutual aid in the event of a disaster. Since rapid site recovery is the shortest way to business continuity, both the site recovery strategy and substitution strategy should be considered.

⁵⁰

⁴⁸ There are many ways to classify strategies. In the case of site substitution strategies, there are various kinds as indicated in Chapter 4.2.1. If demand for a certain critical operation is not expected to increase in the future, postponement of recovery of the critical operation, withdrawal from the business concerned, or shifting to a new business may be examined in a strategy based on management judgment in view of the impact on cash flow.

⁴⁹ In short, it is difficult to examine measures without assuming a certain level of damage arising from the incident identified in an analysis and assessment of risks. However, it is important not to focus too much on the predicted damage; actual damage will usually differ from the predicted damage and therefore efforts should be made to develop strategies and measures which are effective for various kinds and conditions of incidents. In the case of a natural disaster, etc., it is recommended to refer to the damage predictions made by the central and local governments. However, such damage predictions may not be based on scientific and maximum possible damage. One of the lessons learned from the Great East Japan Earthquake is that actual damages may exceed predicted damages.

⁵⁰ This approach assumes that even if an enterprise suffers unexpected damage, if the damage is the same as that predicted for “an incident as an outcome (or impact),” the strategy and measures for the incident as an outcome should also work for unexpected damages.

It is true that measures to realize a business continuity strategy, including these aspects, often require a certain amount of expenditure even during normal times, and it is important for the management to judge how much they are willing to spend. For example, there may be measures to reduce costs, such as forming partnerships with other enterprises. As already noted, however, these measures must ensure the supply of products and services in an emergency and therefore can yield many advantages, including high evaluation from customers, etc., acquisition of new customers, expansion of transactions, and improvement of investors' confidence in an enterprise.

Therefore, enterprises should examine various options and select strategies and measures based on a thorough examination of cost-effectiveness.

Considering these examinations, the management must determine business continuity strategies and measures to be implemented, and officially determine the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) for each critical operation which is feasible and can be explained externally.

In view of the necessity of reviewing BCM and making continual improvements, the grounds for determining strategies and measures based on analyses, materials showing the decision process, reasons for making selections, etc. should be kept as records.

4.2 Examination of Business Continuity Strategies and Measures

It is particularly important that enterprises should consider the following when examining business continuity strategies:

- (1) Continuation or early recovery of the supply of critical products and services
- (2) Ensuring core functions of enterprises

In addition, the following are also important:

- (3) Maintenance of information and information systems
- (4) Fund procurement
- (5) Responses to legal regulations, etc.
- (6) Securing consistency with activities of government organizations and social infrastructure operators

Each of these matters is explained below.

4.2.1 Continuation or Early Recovery of the Supply of Critical Products and Services

One of the purposes of BCM for general enterprises is to continue or quickly recover their critical business, or to supply critical products and services. When examining a business continuity strategy, the first task is to examine how to achieve this.

Specific options of a business continuity strategy and its measures are indicated below. Then an enterprise should examine the cost of measures, etc. which must be taken in advance, the time necessary for preparations, the cost of implementing such measures at the time of disaster, and the possibility of procuring necessary management resources.

An enterprise should conduct works by predicting the damage arising from one critical incident identified in the analysis and assessment of risks, which is common to the paragraphs of Chapter 4.2. However, it is more practical to prioritize the predicted damage (for example, light, serious or severe damage) and to examine strategies and measures for each case.⁵¹

⁵¹ For example, the following may be advisable: site recovery if damage is slight; operation at an alternative site on condition that operation will return to the original site in the future, if damage is serious; and operation at an alternative site without returning to the original site in the future, or withdrawal from the business, if damage is severe.

- (1) Strategies and measures for business sites
 - Prevention or reduction of damage to buildings and facilities of sites (head office, branches, plants, etc.)⁵²
 - Multiplication and distribution of sites⁵³ (production at other site even in normal times; or only deciding the location of the other site in advance and then rapidly establishing lines at the site when a disaster strikes)
 - Collaboration with other companies (OEM, outsourcing, mutual aid agreements, etc.)
 - Teleworking and working at satellite offices⁵⁴
- (2) Strategies and measures for procurement and supply
 - Continuity of supply by reviewing reasonable inventory levels and distributing the locations of inventory
 - Diversification of suppliers or securing alternative suppliers (however, note that multiple suppliers may be affected by a disaster, or that there may be only one sub-supplier of multiple suppliers, and the sub-supplier may be affected by the disaster)
 - Collaboration with customers and suppliers (holding of the same inventory, accurate assessment of suppliers' business continuity capabilities, request for and assistance in the implementation of BCM, implementation of joint training on business continuity, request for accurate assessment of sub-suppliers' business continuity capabilities, and others)
 - Simplification of alternative procurement (considerations at the stage of designing the specifications such as using general-purpose parts)
- (3) Strategies and measures for securing authorized persons
 - Prior development and procurement of backup personnel for the persons indispensable to the continuity of critical operations (cross training, new employment, etc.)
 - Creation of a system or procedure for receiving help from supporters and sharing procedures, etc. with them where possible
 - Securing authorized persons who can assist suppliers or collaborating companies in conducting BCM
 - Taking measures to ensure the safety and health of personnel, not only employees but also their families, contractors and business partners
 - Using telework for work that can be done remotely. For work or the type of operation where telework is difficult, various work styles that take infection prevention into consideration, such as staggered commuting to avoid crowded transport times, dispersing work locations, and shiftwork systems may be introduced

4.2.2 Ensuring Core Functions of Enterprises

In an emergency, it will be necessary to collect and analyze much information which is not required for operations in normal times, and to make quick decisions and give instructions, and distribute information. However, if important sites such as the head office of enterprises are seriously damaged, core functions may be interrupted. This will severely hamper business continuity for enterprises, so it is necessary to establish strategies and measures for preventing such situations.

⁵² Measures for preventing or reducing damage are as follows: in the case of an earthquake, introducing earthquake-resistant buildings and facilities, and introducing machinery and equipment, etc. that will not fall over; in the case of flood, changing the floors where equipment is installed; in the case of fire, general fire prevention measures; and in the case of terrorism, tighter security.

⁵³ In addition, the method of securing a site by an enterprise, and the method of using another company's site after business integration or merger with the company may be used.

⁵⁴ In addition, the method of providing labor by switching from machinery or information systems to manual work may be used.

4.2.2.1 Measures in the Event that the Head Office Suffers a Disaster

In a site recovery strategy for the head office (or the site performing the core function for an enterprise), taking measures for reducing the damage arising from an anticipated incident for buildings and facilities is the fundamental strategy and is crucial for protecting the lives of employees, etc. However, it is essential to consider the case where the head office cannot be used due to damage, and as a substitution strategy to secure an alternative site which will not be affected by the same disaster.⁵⁵

The core functions of enterprises are performed by the response headquarters (including the management), finance department, accounting department,⁵⁶ personnel department, public relations department and others. For these departments to function, it is necessary to secure management resources, including indispensable personnel and facilities. Therefore, it is necessary to secure a system or chain of command (including a proxy system) for emergency response and rapid decision-making and instruction,⁵⁷ and in particular, measures are needed to ensure communication means, facilities such as electricity, lifelines, to ensure timely and sufficient information sharing, and to establish a system for rapid decision-making and instruction online.⁵⁸

4.2.2.2 Information Transmission

If an enterprise is faced with a contingency, and if an “information blackout” (stakeholders do not know what enterprises are doing) occurs, customers may switch to alternative sources of procurement, further damaging its business continuity. If time passes but the enterprise fails to announce information on the possibility of recovery, it may be unable to fulfill its social responsibilities.⁵⁹

To prevent this situation, enterprises must establish systems for announcing or sharing information with customers, customers, employees, shareholders, local residents, central and local governments, etc., maintain information on contact addresses, and secure ways of transmitting information.⁵⁵

4.2.3 Maintenance of Information and Information Systems

Nowadays, the continuity of critical operations depends on the availability of important information (or vital records), including an enterprise’s documents⁶⁰ and information systems. Important information should be backed up, and stored at two or more places which are unlikely to be simultaneously hit by the same incident.⁶¹ A backup system should be established for important information systems,⁶² if necessary (such systems are not general-purpose, but custom-made ones), and it is also essential to secure redundant power sources and power lines.

⁵⁵ Alternative sites should be selected carefully, because in a metropolitan area, for example, multiple alternative sites should be prepared separately for incidents during the night, on holidays, or during working hours in view of being able to gather employees, etc. Alternative sites may include an enterprise’s sales office, office of another company in the same business, office of a customer, chamber of commerce office, company-owned house or dormitory, etc. Furthermore, it is necessary to determine in advance how, when and who should assemble at which alternative site, and what operations to continue.

⁵⁶ In general, even after a disaster, delays in payment of salary or payment to suppliers, etc. cannot be permitted. Therefore, it is necessary to clarify in advance what actions should be taken by the accounting department.

⁵⁷ In the case of emergency responses, it is important to clarify the roles of responsible persons and persons in charge with respect to BCP and disaster management activities. These matters are explained in Chapter 5.1.1.

⁵⁸ Possibility that a physical emergency response could lead to greater damage should also be considered.

⁵⁹ A global enterprise should examine the transmission of information in multiple languages, including English, as employees, customers, customers, etc. may be foreigners. A global enterprise should also consider the time difference between Japan and countries to which information is sent.

⁶⁰ Documents include design drawings, sketch drawings, quality control materials, etc., documents necessary for recovery, alternative production, etc. In the case of internal emergency responses, it is important to clarify the roles of responsible persons and persons in charge with respect to BCP and disaster management activities. The details are explained in Chapter 5.1.1. Documents include those for securing control, legal compliance and accountability, those for establishing rights and obligations, and those for securing debts and credits.

⁶¹ To store data at two or more places which are unlikely to suffer the same incident simultaneously, it is recommended to examine methods such as storing documents and electronic data in a remote location.

⁶² For backup systems, please refer to METI’s “Business Continuity Plan Formation Guidelines” (reports and reference materials of the Research Group on Corporate Information Security Governance), “IT Service Continuity Guidelines” and others.

The frequency of information/data backup should be decided based on careful consideration of how long the enterprise can tolerate any loss of certain information or data used in normal times.⁶³ Before an enterprise changes over from alternative facilities to regular ones, they should create a recovery plan to prevent obstacles to operations due to loss or mismatch of data.⁶⁴ When telework is used to continue operation, it is necessary to consider information handling and information security measures.⁶⁵

4.2.4 Fund Procurement

If enterprises suffer a disaster, their revenues will decrease or temporarily cease. However, since they must continue to pay salaries and suppliers, etc., their cash flow will worsen. After the Great East Japan Earthquake, many enterprises went bankrupt because their cash flow worsened and they ran out of cash. Recovering from damage, establishing alternative sites, etc. temporarily require a large amount of money. Furthermore, not only securing funds at the time of disaster but also securing funds for taking proactive measures in normal times are equally important.

Therefore, enterprises need to make funding and financial arrangements, and so should strive to secure the minimum cash on hand in preparation for a critical incident, and to research various systems, including disaster loan programs offered by the private sector and central/local governments.⁶⁶

- Insurance, mutual aid, derivatives, reservation for bank's disaster loans, post-disaster loans (for which a contract must be signed in advance)
- Loans which can be used for proactive measures (BCM rating loans, BCP support loans, etc.)⁶⁷

It is also important to communicate, in normal times, with financial institutions, customers and the parent company with respect to financing. Enterprises should select customers in advance who will agree to extend the due date for payments to them, or to make payment in cash before the due date at the time of a disaster, and to conclude agreements with such customers.

4.2.5 Responses to Legal Regulations, etc.

Even if enterprises suffer damage arising from an anticipated incident, they are required to comply with laws and regulations as well as local government regulations, etc.⁶⁸ However, these regulations usually assume that enterprises are under normal conditions. In some cases of business continuity after a disaster, full compliance is difficult or the regulations should be relaxed to facilitate rapid business recovery. If there are concerns of this kind, enterprises should examine, in normal times, desirable emergency deregulation measures, etc. in collaboration with other companies and industries and make requests to related central and local government organizations. In addition, in the event of a long-term disaster, laws and regulations may be enacted and implemented, and flexible responses are required, including the timing of BCP activation, by collecting information during disaster (without waiting for laws and regulations).

⁶³ The objective of recovering lost data to a certain time point (for example, the past one week, the previous day, etc.) is referred to as "Recovery Point Objective (RPO)." Although it is desirable to restore lost data as recently as possible, the cost tends to increase proportionally.

⁶⁴ A recovery plan may include the following considerations: (1) the backup ordering system, when put into operation, should be compatible with the settlement system, and (2) if office work has been done manually, data should not be entered into the recovered information system until an inspection is made to ensure that the manually processed data are correct.

⁶⁵ Information security measures include cybersecurity management including antivirus measures and supply chain.

⁶⁶ It is advisable to attach special conditions to payment at the time of an earthquake or flood to fire insurance for buildings and property. Some profit insurance, business continuity insurance policies, etc. will pay "lost operating profit" arising from a shutdown or "ordinary expenses of salary, etc. for employees." Other than insurance, securitized products, including earthquake derivatives, have been developed. Large enterprises may utilize commitment line contracts, bonds, etc. Note that insurance money may be used to increase capital but loans represent debts which must be repaid.

⁶⁷ The BCM rating loan is provided by the Development Bank of Japan. Support loans are provided by regional banks, etc.

⁶⁸ For example, for the spread of infectious diseases, there are overseas laws and regulations such as entry and exit restrictions and lockdowns, and domestic laws and regulations such as state of emergency declarations and measures to prevent the spread of infection. Global enterprises are required to take into account differences in laws and regulations with other countries as necessary. During the spread of infectious diseases, the central and local governments may announce which businesses are required to continue operations or request that businesses refrain from operating. Guidelines for preventing the spread of infection may also be published.

4.2.6 Securing Consistency with Activities of Government Organizations and Social Infrastructure Operators

To make good practice in business continuity effective, it is important for enterprises to ensure that their BCP and BCM are consistent with the BCP and BCM, disaster management operational plans, and regional disaster management plans of central and local governments and social infrastructure operators, including designated public institutions. On the other hand, central and local governments and social infrastructure operators must understand the BCP and BCM of regional enterprises and try to reflect such BCP and BCM in their plans.

4.3 Coexistence with the Local Community and Contributions

Even from the viewpoint of their business continuity, enterprises should collaborate with the local community when taking action in an emergency.⁶⁹ Important customers and employees may be residents of the local community. The recovery process involves carrying in materials and machinery, construction noise and vibration, and other public nuisances which need the understanding of the neighborhood.

Therefore, enterprises must respect the local community at first and strive to coexist with it. To avoid causing nuisances to the local community, they should take safety measures in normal times such as for the prevention of fire, spread of fire, or ejection or leakage of medical substances. At the time of disaster, they must verify whether or not such problems have occurred, or whether or not there is a danger of collapse of affected buildings outside the premises. If the surrounding area is likely to be at risk, they should alert all residents in the neighborhood or request them to evacuate, and report to the administrative authorities and take action with the authorities. Furthermore, each enterprise should not act in its own interests, because such behavior could cause heavy traffic congestion, panic-buying of goods, and other problems which would impede the recovery of the local community.

As members of the local community, enterprises must actively contribute to it. They should conclude agreements with local governments,⁷⁰ and build, in normal times, close collaborative relationships with various actors in the local community.⁷¹ After a disaster has caused damage, if enterprises ask employees other than personnel in charge of emergency tasks to stay at home for the time being, those employees may have opportunities to save other lives in the neighborhood and help the weak. If enterprises are located in the center of a city, such action could also help ease traffic congestion.⁷²

As contributions to society, greater use of the volunteer leave system among enterprises is expected to boost volunteer activities by employees on an individual basis.⁷³

The local community should understand that social contributions by enterprises are completely different from their management judgment of shifting to alternative sites for business continuity. Such enterprises located in the local community may return to their original locations only if they have been able to survive in other places by invoking BCP, and can then contribute to the recovery of the local community.

⁶⁹ Not only in the case of site recovery but also when moving to an alternative site, enterprises should aim to maintain or improve relationships with the local community based on management judgment in view of returning to the original site in the future.

⁷⁰ The contents of the agreement may include the provision of water and food, the provision of shelter, cooperation in recovery work, repair of equipment, transportation of goods, the despatch of engineers and the like.

⁷¹ Enterprises may offer meeting places or exhibitions for residents' associations or NPOs, dispatch lecturers, or co-organize seminars.

⁷² Especially in metropolitan areas, instructing employees to report to work could hinder transportation for relief activities, water/food shortages, or difficulties in dealing with sewage or garbage problems.

⁷³ Enterprises can contribute to the local community in many ways, including donating relief funds and goods, opening parts of premises or buildings to stranded persons having difficulty returning home and other persons, and dispatching engineers and technicians to help disaster-relief operations in the affected local community. If enterprises have facilities which can be turned into first-aid stations or evacuation shelters in the event of a disaster, they are recommended to keep, even in normal times, a private electricity generator, private source of drinking water, alternative fuel, etc.

V Establishment of Plans

Based on the strategies and measures established in the preceding chapter, the following plans should be established:

- (1) Business Continuity Plan
- (2) Plan for Implementing Proactive Measures
- (3) Plan for Implementing Education and Training
- (4) Plan for Implementing Review and Improvement

5.1 Preparation and Establishment of Plans

5.1.1 Business Continuity Plan

The term “Business Continuity Plan (BCP)” has been used with almost the same meaning as BCM in Japan. However, the Guidelines use it with the international meaning of a response plan for a critical incident.⁷⁴ The BCP includes strategies and measures, options, response systems, response procedures, etc. which are implemented to achieve the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) for critical operations after a disaster.

A BCP predicts damage arising from a specific incident. However, it is recommended to establish a flexible BCP that can be implemented under different conditions since the aim of BCM is to “continue critical operations even if an enterprise faces a critical incident.” If an unexpected situation occurs, an enterprise need not adhere to individual responses defined in an established BCP, but must make judgments on a case-by-case basis based on the BCP. The management should demonstrate good leadership to make a BCP function effectively.

5.1.1.1 Emergency Systems

In preparation for a contingency, enterprises are required to establish emergency systems for business continuity, and clarify the roles and responsibilities of persons concerned and the chain of command. The management should act as general manager of such systems. Since key players could be killed, injured, or out of communication, authority should be assigned to at least two persons, and deputies and their ranking should be determined in advance.⁷⁵ Since various non-routine operations must be done in an emergency, it is advisable to establish a cross-sectional special system for business continuity.⁷⁶

Furthermore, for instances such as initial responses in case of a disaster and the prevention of secondary disasters, it is necessary to designate persons and their duties (refer to Chapter 5.1.1.2), a responsible person for each division or team, a personnel plan, roles and authority of persons, systems, etc.

5.1.1.2 Emergency Response Procedures

Emergency response procedures are established to enable critical operations to be implemented within the Recovery Time Objective (RTO). Therefore, enterprises should continue to have a strong sense of purpose. Since necessary responses will naturally change with the lapse of time after an incident, it is important to review the order of priority for responding at each stage.

⁷⁴ In Japan, the term BCP was often used in a broad sense of “a plan document including the contents of BCM as a whole”. However, in ISO standards and many foreign BCM standards, etc., BCP is used in the narrow sense of “a plan document for continuity of critical operations in case of disaster.” In short, BCP does not include plans for proactive measures, education and training plans, review and improvement plans, etc.

⁷⁵ It is recommended to arrange various means of communications with the management so that they can handle important matters even if they cannot gather at a certain place.

⁷⁶ Existing organizations may be used as systems for this purpose. Or, an individual organization may be established for each function, including information gathering, analysis and assessment, logistics support, providing responses, distributing information, etc. It is also desirable to establish an on-site disaster-response headquarters depending on the conditions of the disaster, and to flexibly establish a customer response team or a support team for affected employees.

Of the responses to be made at the initial stage, the table below indicates those responses for which procedures and implementation systems should be established and, if necessary, a checklist or entry form should be prepared. It is advisable to prepare a master procedure sheet, for example, so that various responses can be implemented and managed in chronological order.

In addition, among the events identified in the risk analysis and evaluation in Chapter 3.2 that may cause damage to enterprises and organizations themselves, the events for which the possibility of damage from storms, floods, or infectious diseases occurring overseas can be predicted in advance, it is advisable to include in an overall procedures the content and standards of preventive actions before damage occurs, taking into account advance responses in society, such as weather warnings and planned suspension of public transportation. This includes, for example, implementing planned leave to ensure safety and address commuting difficulties due to the planned suspension of public transport services, communicating that flexible responses are permitted for potentially affected stores, implementing telework through early decision-making, and decision to limit outings by promoting special leave systems.⁷⁷

Table 5.1.1.2-1 Examples of Responses in the Initial Stage

Party	Responses	
	Items	Details
Disaster-response headquarters (head office and each site)	<ul style="list-style-type: none"> Gathering, establishment of disaster-response headquarters, and establishment of chain of command 	<ul style="list-style-type: none"> Persons gather at the designated place according to the plan (*if necessary, attendance at work can be restricted to ensure safety) Immediately establish the disaster-response headquarters. If the designated place cannot be used, gather at an alternative place.
	<ul style="list-style-type: none"> Checking of damage to management resources, including buildings, facilities and employees 	<ul style="list-style-type: none"> Check damage to buildings, structures, facilities, work sites, etc. Confirm the safety of employees, etc.⁷⁸ and summarize the results.
	<ul style="list-style-type: none"> Ensuring the safety of customers and employees, and distribution of goods 	<ul style="list-style-type: none"> If evacuation is necessary, help customers and employees to evacuate. Distribute necessary goods, including water and survival foods (utilize stockpiles, and procure additional stockpiles if necessary). If necessary, give instructions on a safe way of going home, or instructions on waiting if returning home is dangerous.

⁷⁷ The descriptions of pre-disaster preparations and post-disaster actions have the same intention with the timeline that organizes information to be disseminated and actions to be taken in chronological order, focusing on "when," "who" and "what" after assuming and sharing the situation when a disaster occurs

⁷⁸ It is important to confirm safety in order to identify who is available to assist with business continuity.

	<ul style="list-style-type: none"> ● Prevention of secondary disasters 	<ul style="list-style-type: none"> ● Implement safety measures to prevent collapse, fire (shut off or check gas valves, and if necessary, shut off some power sources) and leakage of chemical solutions, and designate dangerous areas as restricted zones. ● If the surrounding area is likely to be at risk, alert residents in the neighborhood of the danger or ask them to evacuate, and report to the administrative authorities.
	<ul style="list-style-type: none"> ● Transmission of information on the conditions of an enterprise 	<ul style="list-style-type: none"> ● Secure means of communication. ● Collect information on company-wide conditions, etc. ● Transmit information on the conditions of the enterprise to persons inside and outside the enterprise (utilize contact lists⁷⁹).
	<ul style="list-style-type: none"> ● Invocation of Business Continuity Plan 	<ul style="list-style-type: none"> ● After taking the necessary initial responses, an authorized person decides whether to invoke the BCP based on the pre-determined standards. If the BCP is invoked, the enterprise will shift to the business continuity system (refer to the following table).
	<ul style="list-style-type: none"> ● Recording of responses taken 	<ul style="list-style-type: none"> ● Record responses taken, problems which occurred, etc.⁸⁰
Each employee	<ul style="list-style-type: none"> ● Ensuring the safety of oneself and other persons (common to workplace, business outing, and home⁸¹) 	<ul style="list-style-type: none"> ● After ensuring one's own safety, carry out initial fire-fighting, and rescue injured or trapped persons in the neighborhood (by utilizing rescue materials). ● Check surroundings, and if necessary, evacuate.
	<ul style="list-style-type: none"> ● Reporting one's own safety (same as above) 	<ul style="list-style-type: none"> ● Report on the safety of oneself and family members based on the predetermined method.

After the necessary initial responses have been taken, an enterprise should implement business continuity responses. Of the responses to be made at this stage, those responses for which procedures and implementation systems should be established and, if necessary, a checklist or entry form should be prepared are indicated in the following table. It is advisable to prepare a master procedure sheet, for example, based on which the implementation of various responses can be managed in chronological order.

⁷⁹ Contact lists of customers, affiliates, administrative authorities and mass media should be prepared in advance and kept up to date.

⁸⁰ Once conditions after an incident have calmed down, it is important to record the responses taken after the incident so that persons may reflect on their responses or activities. It is recommended to prepare in advance forms for recording such matters.

⁸¹ "home" indicates at home at night and on holidays, returning home early and waiting at home.

Table 5.1.1.2-2 Examples of Business Continuity Responses

Party	Responses	
	Items	Details
Disaster-response headquarters and the business continuity organization (head office and sites for critical operations)	<ul style="list-style-type: none"> ● Verification and adjustment of matters needed for business continuity of an enterprise 	<ul style="list-style-type: none"> ● Communicate with suppliers of important products and services and the authorities concerned, and collect information via updates and notices on websites. ● Verify matters needed for business continuity of an enterprise, and make adjustments with other parties if necessary.
	<ul style="list-style-type: none"> ● Confirmation of capacity and possibility of business continuity at current and alternative sites 	<ul style="list-style-type: none"> ● Confirm the possibility of procuring necessary resources by examining the conditions of damage to management resources of an enterprise and the conditions of suppliers and supply chains. ● Back up information, keep the backup systems, and confirm the conditions of operation. ● Check the necessity and availability of materials for recovery. ● If necessary, dispatch an advance team or survey team to affected sites. ● Estimate the possibility of recovery and the possible recovery time for the current site. ● Confirm the conditions of alternative sites and those of OEMs and other business partners. ● If necessary, estimate the operation startup time, etc. at alternative sites. ● Consider ICT tools (social media, etc.) and telework that can be used in-house, while taking into account the safety, security, and health of employees' work environments.
	<ul style="list-style-type: none"> ● Determination of strategies and measures to be implemented 	<ul style="list-style-type: none"> ● Determine strategies for recovery, substitution, etc. (site recovery, utilization of alternative sites, utilization of alliance partners, including OEMs). ● Prioritize basic policies, objectives and measures. ● Determine main measures to be implemented based on strategies.
	<ul style="list-style-type: none"> ● Continuity and restart of operations 	<ul style="list-style-type: none"> ● Implement various measures for continuity and restart of operations (utilize recovery procedures for current sites, procedures for establishing alternative sites, procedures for establishing backup systems, etc.). (*If necessary, ensure awareness that safety of employees and customers is prerequisite.) ● Communicate and coordinate with parties engaged in critical operations. ● Manage the progress of implementation of measures and instruct additional measures. ● Secure special budget. ● Grasp conditions of continuity, restart and recovery of operations.

<ul style="list-style-type: none"> ● Transmission of information on the conditions of an enterprise 	<ul style="list-style-type: none"> ● Compile and select the information to be transmitted externally. ● Transmit information on the in-house conditions of business continuity to stakeholders such as business partners, local residents, and local governments, etc.
<ul style="list-style-type: none"> ● Returning to normal operations 	<ul style="list-style-type: none"> ● Switch from extraordinary or ad hoc methods or systems for implementing operations to normal ones.⁸²
<ul style="list-style-type: none"> ● Recording of responses taken 	<ul style="list-style-type: none"> ● Record responses taken, problems which occurred, etc.

5.1.2 Plan for Implementing Proactive Measures

Of the measures determined together with strategies in the preceding chapter, an enterprise should, if necessary, determine the details of those measures which must be implemented sequentially in normal times (so-called “proactive measures”), secure persons in charge of implementing such measures, secure budget and necessary resources, and select suppliers and subcontractors. Then, an enterprise needs to establish a concrete plan for implementing proactive measures, including a schedule for doing so. Examples of proactive measures which are often implemented are as follows. It is important not to delay implementing those proactive measures that must be implemented quickly to achieve the set Recovery Time Objective (RTO) and Recovery Level Objective (RLO).

- Installing or securing manuals, PCs, telephone lines, desks, various documents, office equipment and facilities for response sites (in the head office, etc.) and alternative sites, etc.
- Alternative measures for lifelines, including communication, power sources and water (in-house power generation, redundancy lines, etc.)
- Measures for protecting the buildings, facilities, etc. of current sites (seismic strengthening, fire prevention measures, flood countermeasures, antiterrorism measures, etc.)
- Determining the data of the information system to be backed up, the backup procedures, and the procedures for restoring from the backup system
- Backing up important information and documents (vital records)
- Multiplexing or distributing sites for operations, including establishing an alternative supply system at alternative sites
- Preparation of a teleworking environment (computers for working from home, remote access environment, information security measures, etc.)
- Diversifying suppliers (raw materials, parts, transportation and other services) and customers
- Selecting alliance partners, and concluding agreements, etc. with them (conclusion of OEM or aid agreements, etc.)
- Increasing, and diversifying the locations of, inventories
- Securing, and providing training to, backup personnel
- Measures for securing funds
- Procuring stockpiles⁸³, rescue apparatus, etc.

5.1.3 Plan for Implementing Education and Training

An enterprise can only achieve business continuity if the management, other officers and employees have sufficient capabilities and the competence to perform their roles in BCM. Therefore, education and training must be provided to give them such capabilities. To ensure the systematic and steady implementation of

⁸² For many operations, methods of returning to normal operations may be examined in detail after a disaster. For the information system, however, it is important to establish the method of returning to normal operations and to conduct training in normal times.

⁸³ The types and quantities of stockpiles should be determined based on the local government ordinances in the area where the enterprise or organization is based, and the stockpiling method that suits the corporate characteristics should be considered. For example, the Tokyo Metropolitan Government Ordinance on Measures for Stranded Persons stipulates that business operators are obligated to make an effort to stockpile three days' worth of drinking water, food, etc. so that employees can remain within the facility.

education, etc., it is necessary to develop an education and training plan which clarifies the system for giving education and training, the annual purposes thereof, object persons, methods, periods, etc.

To maintain the effectiveness of BCM, it is especially important to provide education to new managers and staff in charge who are designated following an organizational change, personnel change, recruiting, etc. The implementation plan should fully consider such elements.

The methods and details of education and training are explained in Chapter 6.2.

5.1.4 Plan for Implementing Review and Improvement

To conduct BCM checks, management reviews, continual improvements, etc., it is essential to establish a review and improvement plan, determine the systems, schedule and procedures, and steadily conduct reviews and make improvements. Certain checks or reviews should be conducted periodically, while others may be conducted if necessary. The details, procedures, etc. of the review and improvement of BCM are explained in Chapter VII.

Since this plan includes a review by the management and continual improvement, the plan should be included in the business plan of the enterprise and organization as a whole which is approved by the management.⁸⁴

5.2 Documentation of Plans, etc.

The plans established in Chapter 5.1 must be documented (including electronic medium) without fail. Plans must be documented to implement and manage the details of plans without fail, or to facilitate education or transferring work between persons in charge. Enterprises should decide the details of documentation of plans as appropriate.

If enterprises as a whole implement BCM, it is important to prepare a document by division, site or role. To facilitate actual works or activities, it is recommended to prepare manuals, checklists, etc.^{85,86}

On the other hand, documents must be continually updated.⁸⁷ If actual damage is different from the predicted damage, the contents of the BCP must be practiced in a flexible manner. The importance of documents lies not in their precision but in their ability to effectively help people to take action. Documentation itself is not the final goal.

It is important to distribute (a part of) the BCP to be used in case of emergency, manuals, etc. to responding persons and ask them to manage such documents properly and ready for use at any time.⁸⁸

⁸⁴ It is important to improve BCM concurrently with the planning of business plans, etc. of enterprises. For example, BCM should be improved in accordance with the enterprise's main management cycle (fiscal year, accounting period, business reports, etc.).

⁸⁵ In an emergency, there is no time to read manuals. Therefore, it is advisable to prepare a checklist which can be used for confirming policies or directions, and managing the progress of essential measures, for the convenience of those who will give instructions. A checklist of urgent tasks will also help those in charge.

⁸⁶ In the case of alternative production for certain products, materials drawings, instructions, etc. will be needed. Therefore, manuals, etc. which are not used in normal times will become indispensable in a disaster.

⁸⁷ If documents are too detailed and the persons in charge change, the new persons will find it difficult or onerous to renew or improve the original plans or manuals and renewal work. Therefore, documents should be prepared to facilitate maintenance, management and continual improvement.

⁸⁸ It is advisable to distribute (a part of) the BCP to the homes of key persons assuming that a contingency may occur at night or on holidays. However, the BCP contains personal information, so the risk of leakage must be considered.

VI Implementation of Proactive Measures and Education/Training

6.1 Implementation of Proactive Measures

Based on the plan for implementing proactive measures prepared in Chapter 5.1.2, each department in charge and persons in charge should implement such proactive measures without fail.⁸⁹ The progress of proactive measures implemented by each department is managed by the manager of each department, and managed by the BCM secretariat without fail.⁹⁰ At this stage, the establishment of BCP, etc. is completed. Therefore, the secretariat and the project team which have promoted analyses and examinations have achieved a major aim. However, if such structures are simply broken up, their know-how may become scattered and lost in many cases. It is strongly recommended, therefore, that such structures should be maintained as a company-wide system⁹¹ for implementing proactive measures and education/training (refer to Chapter 2.2). The fact that we have focused on the importance of implementing proactive measures and education/training and the importance of review and improvement is one of the main reasons for shifting the concept from BCP to BCM in revising the Guidelines.

6.2 Implementation of Education/Training

6.2.1 Necessity of Education/Training

To make BCM effective, it is important for the management, officers and employees to recognize the importance of business continuity, and it is also essential to develop a “corporate culture” to support business continuity. It is unrealistic to expect that if information on BCP is merely circulated within an enterprise in writing or on a website, then everyone concerned can practice BCP. Ongoing education and training are indispensable for the success of BCP.⁹²

In practice, enterprises should provide education to trainees so that they can deepen understanding of and raise their awareness of the necessity of BCM, acquire knowledge of anticipated incidents and the outline of BCM of an enterprise, and learn roles, etc. expected to each trainee. Training should also be held. The purposes of the training are as follows:

- Make trainees practice what they know theoretically (how to use a backup system, confirm safety, etc.) to improve their practical skills.
- For matters for which procedure manuals cannot be made (such as matters requiring the judgment of the management, responses to unexpected matters, etc.), trainees must develop the capability to make proper judgments and decisions.
- Verify BCP and manuals (or identify weaknesses, problems, etc. thereof).

In an emergency, people have no time to read manuals, etc. In preparation for an emergency, therefore, it is important to train personnel in advance to make them familiar with BCP and manuals and enable them to take action at any time.

To ensure business continuity in an emergency, coordination with the local community, suppliers, central and local governments, designated public institutions, etc. will likely be necessary. Enterprises should therefore conduct joint training with other parties.

⁸⁹ The implemented measures will facilitate early recovery, improvement of recovery level, etc. It is recommended to confirm the effects of such measures in training, etc. in the following chapter.

⁹⁰ Measures which are delayed in implementation or cannot be implemented will become important items for assessment and examination in the process of reviewing and improving BCM.

⁹¹ It is advisable to examine a method by which members dispatched from various departments for establishing BCP, etc. are left in an operation organization, even though they remain part-time members. Members should not be changed all at once or the organization should not be downsized, making it difficult to transfer the details to new members (refer to footnote 21).

⁹² Personnel working in enterprises are frequently changed, and business divisions are also often organized or reorganized. Therefore, education and training are necessary in response to such changes.

6.2.2 Method for Implementing Education/Training

It is important to provide various kinds of education and training for respective persons and purposes, such as lectures, understanding and trends of responses, decision-making, actual activities, etc. Implementation methods are illustrated below. Education and training should be provided periodically (annually, etc.), after there have been significant personnel changes due to organizational changes, personnel changes, employment, etc., and after BCP are reviewed or improved.

For any method of education and training, it is important, in advance, to clarify the objectives and to determine methods of evaluating the degree of achievement, so that their effectiveness may be assessed properly.

Table 6.2.2-1 Examples of Methods for Implementing Education/Training⁹³

	Outline	Contents and means (examples)
Education	1. Basic knowledge	<ul style="list-style-type: none"> ● Concept and necessity of business continuity, outline of anticipated incidents ● Lectures, e-learning, etc.
	2. Dissemination of information on BCM of an enterprise	<ul style="list-style-type: none"> ● Lectures, workshops, e-learning, etc.
	3. Understanding of the latest trends	<ul style="list-style-type: none"> ● Subscription to professional literature and articles ● Participation in external seminars, academic courses, workshops, etc.
Training	4. Providing training for and securing backup personnel in advance	<ul style="list-style-type: none"> ● Cross training: A person in charge of certain critical operations and another person in charge of other critical operations exchange work as practice in case they need to do the other person's work in case of absence.
	5. Enhancement of understanding of BCP and manuals	<ul style="list-style-type: none"> ● Walk through: Confirmation of role allocation, procedures, moving to alternative sites, secured resources, etc. should be conducted by desk-based exercises based on BCP and manuals.
	6. Familiarity with procedure manuals and other manuals	<ul style="list-style-type: none"> ● Drills: Learning of important actions, etc. by repeating them in drills. These drills include evacuation, fire, backup system operation, and drills for setting up a response headquarters.

⁹³ This method of classification is one of many methods. Training may be classified according to type of training, such as desk-based or real-time training.

	7. Training for confirming and enhancing business continuity capabilities, and for decision-making	<p>Highly effective training should be conducted by properly combining various elements of training as shown below. It is a good idea to train for cases where sufficient resources cannot be gathered due to the outbreak of an infectious disease, and so on.</p> <ul style="list-style-type: none"> ● Mock disaster exercise: Persons practice making judgments and responses in a mock emergency situation. ● Simulation drill: Persons confirm whether or not they can respond to various situations which may occur in an emergency. ● Role-playing drill: Persons make responses or decisions according to their roles in the changing situation at the time of an emergency. <p>In addition, advanced drills include the following:</p> <ul style="list-style-type: none"> ● Full-scale exercise: In this exercise, desk-based exercises and drills are combined to confirm the capabilities to make responses, including rescue and transportation of mock-injured persons, moving to alternative sites and restarting operations within the Recovery Time Objective (RTO). For this exercise, a situation as close to reality as possible is assumed, and drills are conducted in actual environments. ● Coordinated exercise by industries and markets: This exercise will be conducted by other companies in the same trade, other industries, and customers, etc.
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If weaknesses, problems, tasks, etc. found through education and training are insignificant and do not need management judgment, corrections should be made after the process of inspection and assessment as described in Chapter 7.1. If weaknesses, problems, tasks, etc. are important and need management judgment, they should be reviewed by the management as described in Chapter 7.2. In this case, the BCM secretariat, etc. should assess and examine them and make necessary corrections or improvements only after discussing with, and obtaining judgments from, the management.^{94,95}

⁹⁴ For the definitions of terms such as education, training, exercise, and test, international trends (ISO22398:FDIS) and the like may be taken into consideration. However, the Guidelines do not use strict definitions and focus on the general understandability of such terms in Japan.

⁹⁵ For responses similar to those mentioned in the Guidelines, ISO22301 describes that exercises and tests should be conducted, and their results reviewed by the management to improve them on a continual basis.

VII Review and Improvement

Persons in charge of BCM in each department and the BCM secretariat should evaluate the details and conditions of implementing BCM (including BCP) at regular intervals (once a year or more frequently) in order to avoid a decrease in the effectiveness of BCM and the obsolescence of BCP.

The management should review BCM at regular intervals (once a year or more frequently) concurrently with examining the business strategy and the following fiscal year's budget of an enterprise. Furthermore, the management should review BCM when significant changes occur to the business or internal or external environments. In addition, if the enterprise has invoked a BCP, the management should review BCM considering points to be improved.⁹⁶ Depending on the type of event, it may not be possible to obtain the information necessary to conduct risk analysis and evaluation and to consider countermeasures at the appropriate time. In such cases, flexible responses are required, such as diligently collecting information from the government, local governments, and public institutions, and repeatedly conducting business impact analysis and risk analysis and evaluation.⁹⁷

Then, the enterprise must correct or improve BCM based on the results of the above inspection and review.

7.1 Inspection and Assessment

7.1.1 Assessment of Actual Functionality of Business Continuity Plan

Enterprises must assess whether critical operations will be able to achieve the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) by means of the established BCP. First, it is important to assess the progress of proactive measures that needed to be carried out as preconditions for the achievement, and to test whether the effect can be produced. Then, it should be assessed whether required recovery materials and equipment can be procured within the time prescribed in the BCP. If operations are supposed to be processed manually in the event of a system shutdown, matters that greatly affect the possibility of achievement and whether the prescribed workload turns out as planned should be assessed.

At the time of emergency, available management resources are likely to be limited. However, the proper distribution of such limited management resources might not be fully examined when establishing a BCP. Therefore, it is recommended to verify the BCP from a broad perspective.

It is also recommended that the training mentioned in Chapter 6.2 be carried out for the above-mentioned assessment work and that the functionality be assessed based on the results.

7.1.2 Inspection and Assessment of Business Continuity Management

In the case of BCM, it is constantly necessary to assess whether BCM is regularly corrected following changes to personnel or customers, etc. Furthermore, inspection and assessment should be conducted to check whether BCM adapts to, or is corrected as a result of, changes in business offices, manufacturing lines and operation methods (including operation processes), the introduction of new products or services, changes in business from the conclusion of new contracts, etc., requirements from stakeholders, environmental changes such as revision of laws and regulations, and various other factors.⁹⁸ In addition, customers should be examined in terms of supply chains.

⁹⁶ Even if a trouble relating to daily business continuity for which a BCP need not be invoked, a review is desirable. On the other hand, if another company related with the enterprise invokes a BCP, it may trigger the enterprise to review or improve its own BCP or BCM.

⁹⁷ For example, when gathering information on infectious disease countermeasures, it is important to collect and analyze information based on medical and scientific evidence. Be careful not to implement measures that are still ineffective as corporate countermeasures.

⁹⁸ The impact of a disaster varies by region and organization as the surround external environment changes from moment to moment. Therefore, it is advisable for enterprises with bases in various regions, both domestically and overseas, to inspect and evaluate whether there are any matters that need to be considered for each base.

Regarding the expansion of BCM, inspection and assessment should be conducted to determine whether particular kinds of anticipated incidents or predicted damage to an enterprise's BCM should be increased or expanded,⁹⁹ and whether the scope of business fields or business offices subject to BCM should be expanded.

Enterprises which are advanced in terms of BCM should utilize audits. An audit can be conducted at regular intervals (once a year or more often) to verify the appropriateness, effectiveness, etc. of the following:¹⁰⁰

- Whether proactive measures, training, inspection, etc. are implemented as scheduled, and the budget is executed properly
- Whether business continuity strategies and measures are effective, and are cost effective
- Whether education and training have achieved the objectives
- Whether there are serious gaps between current conditions and industrial standards or best practices, etc.
- Whether an enterprise's business continuity capabilities are improved

Audits are classified into two types: internal audits, which are conducted by internal personnel, and external audits, which are conducted by an outside organization. Since the results of audits are reported to the management, such results may also be used for improving an enterprise's BCM.

7.2 Review by the Management

In preparation for the review by the management, the BCM secretariat should compile the instructions made by the management in the last review; the subsequent progress of BCM; weaknesses, BCM problems and tasks clarified by the results of inspection and training; and the remaining risks,^{101 101} etc. which are not addressed by current measures. Then, the BCM secretariat should select, after discussions with the management, those matters requiring the judgment of the management.

On the other hand, the management may take the initiative to give the BCM secretariat, in advance, directions on the essential points when reviewing BCM. In particular, the management should pay full attention to changes of an enterprise's business, business environment or demands from stakeholders, and review whether BCM adjusts to such changes. If an audit is conducted for BCM, the management should receive a report on the audit results and understand the details of discussions on the review.

The management must also secure enough time for receiving explanations from the BCM secretariat, conduct necessary discussions and assessments, and take the initiative to review BCM in order to maintain and improve the business continuity capabilities of the enterprise. In addition, the management should, based on the results of such review, give instructions on urgent corrective actions/countermeasures and their implementation, and show the direction of improving BCM in the years to come.

7.3 Correction and Improvement

Of the problems identified in the inspection and assessment in Chapter 7.1, those practical problems not requiring management judgment should be corrected as soon as possible. It is advisable to submit a report on the details of such corrections to the management at the predetermined occasion.

⁹⁹ It is recommended to concurrently consider damage predicted by the central government or the occurrence of any new threats.

¹⁰⁰ If an enterprise has already introduced a Quality Management System (ISO9000), Environment Management System (ISO14001), Information Security Management System (ISO27001), etc., the enterprise may utilize audits in line with these management systems. For these ISO management systems, methods are expected to be gradually unified in the future.

¹⁰¹ These remaining risks include those for which a lower priority was given and responses were postponed, such as risks which make it difficult to achieve the Recovery Time Objective (RTO) and incidents, etc. for which it is impossible to respond in view of the current business continuity capabilities.

For corrective actions, countermeasures and matters to be improved for which instructions are given by the management as a result of the management review in Chapter 7.2, actions should be taken without delay, if possible. If investigations and analyses, securing of budget, preparations, etc. are necessary, such measures should be taken in the process of continual improvement of BCM and the progress of implementing such measures, etc. should be managed by the BCM secretariat.

7.4 Continual Improvement

The management, the BCM secretariat and enterprises as a whole are required to assess whether BCM is appropriate in light of an enterprise's management policies, business strategies, and the basic policy, purposes, etc. of BCM, whether the scope of application of BCM and covered risks are appropriate, or whether the business continuity strategy and measures are effective, and must make continual improvements from these viewpoints.

In other words, this continual improvement should be made in all processes of BCM. The management and the BCM secretariat should therefore make officers and employees recognize the importance of BCM. Furthermore, the management and the BCM secretariat should also develop a "corporate culture" to support BCM, and make continuous efforts to maintain and improve the business continuity capabilities of the enterprise in coordination with related parties.

VIII Recommendations to the Management and the Economic Community

The Guidelines have explained the matters which are necessary and desirable for enterprises to introduce and implement BCM, including the establishment of BCP.

All enterprises are required to implement a BCM in order to maintain supplies to customers, secure employment for them and enhance supply chains, etc. Business continuity should be widely recognized as a key social responsibility.

At the conclusion of the Guidelines, the central government would like to make the following recommendations to the management of enterprises and the economic community as a whole to consider when ensuring best practice in business continuity.

<Necessity and Advantages of BCM Efforts>

- (1) Recently, the fact that enterprises have been systematically preparing for critical incidents is more highly evaluated by their stakeholders, administrative authorities, and markets, etc. It is widely recognized that BCM, which is given very high priority by overseas companies, effectively increases corporate value from an international perspective. In addition, ensuring best practice in business continuity also effectively raises industrial competitiveness and enhances supply chains.
This recognition should become more widespread in Japan's economic society, and then enterprises that have received a high evaluation would gain greater advantages.
- (2) Of the risks facing Japanese enterprises, earthquakes are a serious concern for overseas investors, as well as risks arising from other incidents. To overcome the concerns of stakeholders including investors, enterprises should positively disclose information on countermeasures for these risks, including earthquake risk, by effective means (securities reports, business reports, and social and environmental reports).
Enterprises that openly favor disclosure are now highly evaluated.
- (3) The examination of business continuity strategies and measures for contingencies will enable enterprises to grasp the order of priority in each of their critical operations, resources, processes, suppliers, etc. Such knowledge can be used to make improvements to management in normal times, and contribute to quick responses to various environmental changes. Therefore, such studies will be beneficial for management.
It is hoped that many more managers will recognize this and that such studies will become increasingly common in the business world.

<Necessity of Review and Improvement of BCM>

- (4) The business range and operation systems of enterprises and internal and external environments change constantly. Inspections and improvements to BCP and BCM cannot keep pace with such changes, and so their effectiveness may decrease at any time. To prevent such risk, the management must take the initiative and implement regular and irregular reviews, and continual improvements, of BCM.
- (5) In view of unexpected major disasters and unpredictable events, it is almost impossible to have perfect BCP/BCM. However, managers should not hesitate to commence the BCP/BCM process nor abandon efforts to enhance the process, and should continue to make improvements slowly but surely, and continue to enhance an enterprise's business continuity capabilities.

- (6) To improve the BCP/BCM process, not only individual efforts but also coordination between companies and in supply chains, and coordination in each industry or region, should be encouraged. The management should actively implement such efforts as joint BCP training in cooperation with customers, trade organizations, interested parties in regions, etc. and the review of the BCM process.

<Requirements Other Than BCM>

- (7) Coexistence with the local community is as important as the business continuity of an enterprise or organization, because the enterprise or organization is a member of the local community and is supported by employees and customers in the community. Therefore, the management must not only perform social responsibilities but also actively engage in relief and recovery activities for the local community, since the recovery of the local community is essential for business continuity in many cases.

<Advice for the Management>

- (8) If an enterprise suffers damage or faces disruption of supply due to a contingency, available management resources are also likely to be severely limited. In such a case, the management must carefully select critical operations which must be conducted on a priority basis because limited management resources, including personnel, articles and funds, should be concentrated on specific operations, and must determine which operations should be recovered and to what level. It is also necessary to consider a safe, secure and healthy work environment for employees and diverse working styles (e.g., staggered commuting, distributed work locations, shift work). The selection of critical operations should be part of management strategy not only when a BCP is invoked but also in the medium and long term, and the management should be aware of this.
- (9) The management must fully understand the necessity and advantages of BCM, continue efforts based on the recognition that effective BCM takes time, labor and cost to establish, and make proper decisions and exercise leadership throughout BCM.

Appendix 1. Glossary

BCP (Business Continuity Plan)

See “Business Continuity Plan (BCP).”

BCM (Business Continuity Management)

See “Business Continuity Management (BCM).”

e-learning

Self-motivated study utilizing IT-based communication networks, etc.

ISO (International Organization for Standardization)

The International Organization for Standardization is an international organization for standardization, comprised of standardization organizations representing each country and engaging in the development and amendment of international standards for all industrial fields (mining and manufacturing, agriculture and pharmaceuticals, etc.), except for electricity, electronic technology and communications.

NPO (Non-profit Organization)

Non-profit organization collectively refers to non-profit organizations that are voluntarily and continuously engaged in social contribution activities. The Act on Promotion of Specified Non-profit Activities (NPO Law) provides for a simplified system of granting corporate status to such organizations.

OEM (Original Equipment Manufacturing)

Manufacturing of parts or complete products bearing the brand of a customer company under a license agreement.

Outsourcing

Contracting out operations, etc. to other enterprises, organizations, etc.

Critical Path

Where there are several branches in the process of a project, the critical path is the working path that can complete all the processes in the shortest time. It is necessary to monitor the critical path carefully, as a delay on this path will affect other processes.

Disaster Loan

Many municipalities have systems of loans for disaster damage and lend money to the victims of earthquakes, major fires, and wind and water damage. The scope and terms of loans are published on the websites, etc. of municipalities. Regarding loans to small and medium-sized enterprises, governmental financial corporations establish systems for loans to assist recovery from disasters.

Reservation for Bank's Disaster Loans

This is a scheme in which if an agreement is concluded in advance, a bank promises to extend a loan after a disaster based on conditions, including the credit line and interest rate.

Satellite Office

An office established at a location away from the main office.

Supply Chain

A series of business linkages that connect suppliers to consumers, including development, procurement, manufacture, distribution, and sales. The supply chain involves suppliers, manufacturers, distributors (wholesalers), retailers, and consumers. The management method that attempts to achieve efficiency and integrated management of receipt of orders between customers, procurement of materials and component parts, inventory, production and delivery of products with the aim of increasing corporate revenue is called "Supply Chain Management."

Service Level Agreement (SLA)

A written agreement that provides for the level of service quality required based on the scope and contents of services to be provided and assumptions as well as operating rules to realize the details of the agreement.

Aid Agreement

A prior agreement executed between municipalities and enterprises on operations after an incident. It provides for the supply of food, provision of evacuation sites, and support to open up roads.

BIA (Business Impact Analysis)

A process that confirms the impact on operations and financing caused by a business interruption. It identifies critical businesses, operations and processes and relevant business resources, and analyzes the impact on business continuity in chronological order. For example, the procedures are: (1) identifying critical businesses, (2) analyzing business processes, (3) identifying critical elements (bottleneck) in business continuity, (4) determining the priority in recovery, and (5) setting Recovery Time Objective and Recovery Level Objective.

Business Continuity Plan (BCP)

A plan indicating policies, systems, procedures, etc. so as not to interrupt critical business in an unexpected situation, including natural disasters such as earthquakes, communicable epidemics, terrorist incidents, serious accidents, disruption of supply chains and abrupt changes in management environment, and if critical business is interrupted, to enable an enterprise to recover critical business as soon as possible.

Business Continuity Management (BCM)

Management activities conducted in normal times, including the establishment, maintenance and renewal of BCP, the securing of budgets and resources for achieving business continuity, the implementation of measures, the implementation of education and training for expediting good practice, and the promotion of inspections and continual improvement. The term BCM is considered to be a strategic activity at management level.

Business Continuity Management System (BCMS)

A management system for achieving business continuity (for management system, refer to the definition below).

Information Security Governance

Formulation and operation of corporate governance (mechanism of corporate decision-making) in the company from an information security perspective, with consideration to social responsibilities and an internal control mechanism (internal systems and processes to be formulated and operated to enable the company to do business properly and efficiently).

Third Party Certification System

A system in which an organization (third party) that has no direct transactions with the organization or person examines whether its activities conform to the requirements of the standards and provides certification. Certification by each organization such as an enterprise or municipality or a person is referred to as first-party certification, certification by the other party of the organization or person, including the customer, is referred to as second-party certification.

Derivatives

A general term for transactions deriving from existing financial products (deposits, stocks, foreign exchange transactions, bonds, interest rates, etc.). Typical ones include futures, swaps, options, etc. These transactions are also called “derivative products.”

Hazard Map

A hazard map is a map showing forecasted damage. Municipalities disclose and publish hazard information depending on the situations of localities and cities. Items include volcanic eruptions, areas at risk of landslides and floods, evacuation sites, and evacuation routes after an earthquake.

Back-up Office

An office prepared in advance in case the main office cannot be used due to natural disasters such as large-scale earthquakes, and terrorism, etc. It accommodates personnel required for business continuity and is equipped with facilities and functions required for operations.

Incident

Natural disasters such as large-scale earthquakes, infectious disease epidemic, incidents such as terrorism and strikes, machinery failure, serious accidents, or disruption of supply chains which may interrupt business (in particular, supply of products and services) of enterprises.

Blackout

Conditions in which the interactive exchange of information is impossible between enterprises and related parties.

Bottleneck

The original definition is the narrow neck of a bottle. In business continuity and operation recovery, it means the key elements without which the entire process cannot progress.

Management System

A standardized method of management. Managers participate and repeat a cycle of policy development, planning, doing, checking, and reviewing.

Recovery Time Objective (RTO)

Refer to “3.1.2 Determination of Critical Operations and Examination of Recovery Time Objective/Recovery Level Objective” in these Business Continuity Guidelines.

Recovery Point Objective (RPO)

Refer to footnote 59 in these Business Continuity Guidelines.

Recovery Level Objective (RLO)

Refer to “3.1.2 Determination of Critical Operations and Examination of Recovery Time Objective/Recovery Level Objective” in these Business Continuity Guidelines.

Stakeholders

Individuals, and groups, etc. interested in, or influenced by, the performance of enterprises or organizations are called “stakeholders” (business partners, customers, consumers, employees, shareholders, borrowers, investors, etc.).

Risk Mapping

For an incident which is likely to interrupt business, the likelihood of occurrence is plotted on one axis and the degree of impact on the other axis.

Risk Management

Anticipating risks and contriving to minimize their impacts upon occurrence. It means the management, expertise, systems, and countermeasures for overcoming risks.

Analysis and Assessment of Risks

Identifying incidents which would interrupt business, determining priority incidents by assessing the likelihood and degree of impact of their occurrence, and analyzing and assessing damage, etc. caused by risks arising from such incidents.

Appendix 2. References

- “Business Continuity Plan Formation Guidelines” (reports and reference materials of the Research Group on Corporate Information Security Governance), 2005, Ministry of Economy, Trade and Industry (METI)
- “IT Service Continuity Guidelines,” 2008, METI
- “Business Continuity Plan (BCP) for the ICT of Local Governments (Samples, etc. of the First Edition),” 2013, Ministry of Internal Affairs and Communications (MIC)
- “Guidelines for Assessing Disaster Management and Crisis Management Capabilities of Local Governments,” 2003, MIC
- “Handbook for Contingency Planning in Financial Institutions,” third edition, 2006, Center for Financial Industry Information Systems (FISC)
- “BCP Preparation Guide,” 2013, Tokyo Chamber of Commerce and Industry (TCCI)
- BCAA Standard Text, 2012, Business Continuity Advancement Organization (BCAO)
- JISQ31000 (Risk Management – Principles and Guidelines), 2010, Japanese Standards Association (JSA)
- JISQ27002 (Information Technology – Security Techniques – Code of Practice for Information Security Management), 2002, JSA
- ISO22300 (Terminology), 2012, International Organization for Standardization (ISO)
- ISO22301 (Business Continuity Management System – Requirements), 2012, ISO
- ISO22313 (Social Security – Business Continuity Management Systems – Guidance), 2012, ISO
- ISO9000 series (Quality Management System), ISO
- ISO14001 series (Environmental Management System), ISO
- NFPA1600 (Standard on Disaster/Emergency Management and Business Continuity Programs 2007 Edition), 2007, American National Standards Institute (ANSI)
- AS/NZS HB221 (2004), BCP standards of Australia and New Zealand
- Final Report, “Seeking Reconstruction of a Secure Japan,” 2012, Committee for Policy Planning on Disaster Management, Central Disaster Management Council, Cabinet Office
- Basic Disaster Management Plan, 2012, Central Disaster Management Council, Cabinet Office
- White Paper on Disaster Management 2012, compiled by the Cabinet Office
- “Toward Enhancement of Business Continuity of Enterprises,” 2013, Japan Business Federation
- “Survey on Disaster Management and Business Continuity of Enterprises at the Time of the Great East Japan Earthquake – Toward Recovery with Competitive Power by the Use of Sustainable BCP,” 2011, Development Bank of Japan (DBJ)
- “Shift from Tentative BCM to Practical BCM,” 2013, Hajime Yasui, Arata Institute
- Business Continuity Plan Check Sheet (from the “Book for Easy Understanding of Risk Management” (2nd edition)), 2012, Tokyo Marine & Nichido Risk Consulting Co., Ltd.
- John, P. Kotter, “What Leaders Really Do,” second edition, 2012, DIAMOND, Inc.
- Page on disaster management information (Website of the Cabinet Office, <http://www.bousai.go.jp/>)

- Internet-based information such as Disaster Emergency Message Dial, NTT East Corporation and NTT docomo, <http://www.ntt-east.co.jp/saigai/voice171/>
http://www.nttdocomo.co.jp/info/disaster/disaster_board/index.html
- BCI (Business Continuity Institute): <http://www.thebci.org/>
- DRII (Disaster Recovery Institute International): <http://www.drii.org/>
- Open for Business: IBHS (Institute for Business & Home Safety)
<http://www.disastersafety.org/open-for-business/>
- Ready Business: DHS (Department of Homeland Security)
<http://www.ready.gov/business/index.html>
- Ministry of Health, Labour and Welfare, “Guidelines for Promoting the Appropriate Introduction and Implementation of Telework”
- Ministry of Health, Labour and Welfare, “Checklist for ensuring the safety and health of teleworking workers [for businesses]”
- Ministry of Internal Affairs and Communications, “Telework Security Guidelines”

(Exhibit) Checklist for Business Continuity Guidelines

This checklist is prepared to enable enterprises to check their good practice in business continuity (continual efforts both during and after introducing BCM) in accordance with these Business Continuity Guidelines. This checklist is useful when examining what are needed for good practice in business continuity.

This checklist is also intended to help promote independent efforts by enterprises, so the management should understand and utilize the results of inspections made using the checklist. For details of the following questions, refer to the relevant sections of these Business Continuity Guidelines.

1.4 Requirements for the Management

- ☐ (1) Whether the management understands the necessity and advantages of BCM, the time, labor and investment required, and then decides to introduce and implement BCM as a key responsibility of the enterprise.
- ☐ (2) Whether the management, based on the management philosophy (raison d'être, etc.) and vision, establishes a basic policy for BCM which is linked to management, allocates management resources, establishes strategies, develop plans, including BCP, makes appropriate judgments on the implementation, coordination, improvement, etc. of measures, etc. and ensures the measures are implemented.
- ☐ (3) Whether the management actively participates in discussions, coordination, improvement, etc. concerning BCM.
- ☐ (4) Whether the management seeks stakeholders' understanding of BCM.
- ☐ (5) Whether the management strives to increase the confidence of stakeholders by providing them with information on BCM and business continuity capability from time to time.
- ☐ (6) Whether the management aims to increase competitiveness, transactions, profits, etc. by building a system for improving corporate value through BCM.
- ☐ (7) When invoking a BCP, whether the management appropriately selects strategies and measures. If an unexpected incident occurs, whether the management makes judgments flexibly based on the existing BCP and gives instructions on responses.

2.1 Establishment of Basic Policy

- ☐ (1) Whether the management establishes a basic policy indicating the enterprise's concept of business continuity.
- ☐ (2) In the basic policy, whether the management defines the purpose of business continuity and the objectives to be achieved by BCM, and clarifies the types of business and the offices that are covered by BCM.
- ☐ (3) Whether the Board of Directors or the management council has made a resolution on the basic policy.

- ☐ (4) Whether the basic policy specifies that the top priority should be placed on securing the safety of customers as well as officers and employees of their enterprises, affiliates, temporary help companies, subcontractors, etc. and on preventing secondary disasters at the workplace.
- ☐ (5) Whether the basic policy describes contributions to, or coexistence with, the local community.

2.2 Creation of a System for Implementing Business Continuity Management

- ☐ (1) Whether the management establishes a company-wide BCM implementation system by designating persons responsible for BCM, members of a BCM secretariat, and persons in charge of all divisions concerned.
- ☐ (2) Whether the company-wide BCM implementation system includes the roles of preparation of a BCP, implementation of proactive measures and education/training, and continual review and improvement.
- ☐ (3) Whether the management fulfills its general responsibility and accountability for a company-wide BCM implementation system.

3.1.1 Assessment of Impact of Business Interruption

- ☐ (1) Whether an enterprise assesses the impact of an interruption (or significant deterioration) of the supply of products or services in chronological order and quantifies matters where possible, identifies its critical products and services, and examines the duration of interruption (or significant deterioration) of supply that each such product and service can withstand.

3.1.2 Determination of Critical Operations and Examination of Recovery Time Objective/Recovery Level Objective

- ☐ (1) Whether an enterprise should identify critical operations which must be continued or restored on a priority basis, based on the results of the Business Impact Analysis (BIA).
- ☐ (2) With respect to critical operations, whether an enterprise determines Recovery Time Objective (RTO) and Recovery Level Objective (RLO) and then prioritizes critical operations.

3.1.3 Identification of Key Elements and Bottlenecks

- ☐ (1) Whether all key elements indispensable for implementing critical operations (management resources) are identified without omission.
- ☐ (2) Whether those elements that cannot speed up the recovery of critical operations or raise the level of recovery of critical operations without shortening the time for securing the necessary elements are identified as “bottlenecks.”

3.2 Analysis and Assessment of Risks

- ☐ (1) Whether incidents which may interrupt the business of an enterprise are identified.

- ☐ (2) For such identified incidents, whether the possibility of occurrence and their degree of impact are assessed quantitatively and qualitatively, the kinds of incidents which should be tackled on a priority basis are identified, and such incidents are prioritized.
- ☐ (3) Whether an enterprise examines what damage is caused to key elements by incidents identified as requiring a priority response in (2) above at present (or before the implementation of measures), estimates the currently required time for securing such key elements, the time when such critical operations can be recovered under current conditions (currently-possible recovery time), and the level of operations which can be continued or recovered (currently-possible recovery level).

4.1 Basic Concept of Business Continuity Strategies and Measures

- ☐ (1) Whether a business continuity strategy is examined based on the understanding that the aim of BCM is to “continue critical operations even if an enterprise faces a critical incident.”
- ☐ (2) Whether both site recovery strategies and substitution strategies are always examined.
- ☐ (3) Whether the management determines business continuity strategies and measures to be implemented, and officially determines a Recovery Time Objective (RTO) and Recovery Level Objective (RLO) for each critical operation which is feasible and which can be explained externally.
- ☐ (4) Whether records are kept of the grounds for determining strategies and measures based on analyses, materials showing the development process, reasons for making selections, etc.

4.2.1 Continuation or Early Recovery of Supply of Critical Products and Services

- ☐ (1) Whether strategies and measures for the continuation or early recovery of critical products and services are established depending on the predicted damage (for example, light, serious or severe damage).
- ☐ (2) Whether strategies and measures are established from perspectives of business sites, procurement and supply, and procurement of personnel.

4.2.2 Ensuring Core Functions of Enterprises

- ☐ (1) Whether measures for reducing the damage arising from an anticipated incident for buildings and facilities are taken.
- ☐ (2) Whether an alternative site which will not be affected by the same disaster is secured based on the assumption that the head office cannot be used due to damage.
- ☐ (3) Whether a system for calling out personnel in an emergency and rapidly making decisions to establish the chain of command (including a system of deputies) is secured in order to maintain the core functions of the enterprise.
- ☐ (4) Whether measures are taken to ensure that necessary facilities such as communication means and electricity and lifelines are secured to maintain the core functions of the enterprise or organization, and that systems are in place to share information in a timely and sufficient manner and to enable rapid decision-making and instruction online.
- ☐ (5) Whether systems for announcing or sharing information with customers, customers, employees, shareholders, local residents, central and local governments, etc. are established, information on contact addresses is maintained, and ways of transmitting information are secured.

4.2.3 Maintenance of Information and Information Systems

- ☐ (1) Whether important information (or vital records), including documents, is backed up and stored at two or more places that are unlikely to be simultaneously hit by the same incident.
- ☐ (2) Whether a backup system is established for important information systems (such systems are custom-made, not general-purpose), and redundant power sources and power lines for the system are secured.
- ☐ (3) Whether the frequency of backing up the information is determined after carefully examining how long a data loss can be tolerated if certain information or data used in normal times is lost.
- ☐ (4) Whether a recovery plan to prevent obstacles to operations due to loss or mismatch of data is created before a switchover is made from alternative facilities to regular ones.
- ☐ (5) Whether information handling and information security measures are taken into account when continuing business through telework.

4.2.4 Fund Procurement

- ☐ (1) Whether the minimum cash on hand is secured in normal times in preparation for a critical incident.
- ☐ (2) Whether measures for procuring funds in case of emergency are established by researching various systems, including disaster loan programs offered by the private sector and central/local governments.
- ☐ (3) Whether communications with financial institutions, customers and the parent company with respect to financing are maintained in normal times.
- ☐ (4) Whether customers who will agree to extend the due date for payments or make payment in cash before the due date at the time of a disaster are selected, and whether agreements with such customers are concluded, in normal times.

4.2.5 Responses to Legal Regulations, etc.

- ☐ (1) Whether measures are established to enable enterprises to comply with laws and regulations and local government regulations, etc. even if they suffer damage from an anticipated incident.
- ☐ (2) In preparation for the case in which full compliance is difficult or regulations should be relaxed to facilitate rapid business recovery, whether enterprises examine, in normal times, desirable emergency deregulation measures, etc. in collaboration with other companies and industries and make requests to related central and local government organizations.
- ☐ (3) Whether measures are developed according to the possibility that laws and regulations may be enacted and enforced in the event of a long-term disaster.

4.2.6 Securing Consistency with Activities of Government Organizations and Social Infrastructure Operators

- ☐ (1) Whether enterprises ensure that their BCP and BCM are consistent with the BCP and BCM, disaster management operational plans, and regional disaster management plans of central and local governments and social infrastructure operators, including designated public institutions.

4.3 Coexistence with the Local Community and Contributions

- ☐ (1) Whether safety measures such as for the prevention of fire, spread of fire, or ejection or leakage of medical substances are taken in normal times, to avoid causing disruption to the local community.
- ☐ (2) At the time of disaster, whether enterprises check for problems such as fire, spread of fire, or ejection or leakage of medical substances, or whether there is a danger of collapse of affected buildings outside the premises. If the surrounding area is at risk, whether the enterprises alert all residents in the neighborhood or request them to evacuate, and report to the administrative authorities and take action with the authorities.
- ☐ (3) Whether enterprises strive not to cause heavy traffic congestion, panic buying of goods, and other problems which would impede the recovery of the local community when making or implementing business continuity plans.
- ☐ (4) Whether enterprises conclude agreements with local governments in order to contribute to the local community, and build, in normal times, close collaborative relationships with various actors in the local community. (As members of the local community, they are recommended to act in this manner.)
- ☐ (5) Whether enterprises consider asking employees other than personnel in charge of emergency tasks to stay at home immediately after a disaster causes damage, thereby enabling those employees to save other lives in the neighborhood and help the weak.

5.1.1.1 Emergency Systems

- ☐ (1) Whether emergency systems for business continuity are established, and whether the roles and responsibilities of persons concerned and the chain of command are clarified.
- ☐ (2) Whether the management acts as the general manager of such emergency systems for business continuity.
- ☐ (3) In preparation for the case that key players are killed, injured or out of communication, whether authority is assigned to at least two other persons, and deputies and their ranking are determined in advance.
- ☐ (4) For initial responses in case of a disaster and the prevention of secondary disasters, whether persons and their duties, a responsible person for each division or team, a personnel plan, roles and authorities of persons, systems, etc. are designated or determined.

5.1.1.2 Emergency Response Procedures

- ☐ (1) Whether the order of priority for responses is determined at each stage, as necessary responses will naturally change over time after an incident.
- ☐ (2) Whether procedures of the disaster-response headquarters at the initial stage include the following:
 - Persons to gather to establish the headquarters after an incident, the plan and the designated place
 - Procedure for checking damage to management resources, including buildings, facilities and employees
 - Procedure for ensuring the safety of customers and employees, and distribution of goods
 - Procedure for preventing secondary disasters

- Procedure for transmitting information on the conditions of an enterprise
 - Procedure for invoking a Business Continuity Plan
 - Procedure for recording responses taken
- ☐ (3) Whether procedures for employees at the initial stage include the following:
- Procedure for ensuring the safety of themselves and other persons
 - Procedure for reporting on the safety of themselves
- ☐ (4) Whether procedures for business continuity responses of the disaster-response headquarters and the business continuity organization include the following:
- Procedure for verifying and adjusting matters needed for the business continuity of an enterprise
 - Procedure for confirming the capacity and possibility of business continuity at current and alternative sites
 - Procedure for determining strategies and measures to be implemented
 - Procedure for continuity and restart of operations
 - Procedure for transmitting information on the conditions of an enterprise
 - Procedure for returning to normal operations
 - Procedure for recording responses taken

5.1.2 Plan for Implementing Proactive Measures

- ☐ (1) Whether enterprises, in normal times, designate persons in charge of implementing proactive measures, secure budget and necessary resources, select suppliers and subcontractors, and establish a “plan for implementing proactive measures,” including a schedule.

5.1.3 Plan for Implementing Education and Training (6.2 Implementation of Education/Training)

- ☐ (1) Whether enterprises develop an education and training plan which clarifies the system for giving education and training, the annual purposes thereof, applicable persons, methods, periods, etc.
- ☐ (2) Whether the education and training plan includes education for new managers and staff in charge who are designated following an organizational change, personnel change, recruiting, etc.
- ☐ (3) Whether the education and training plan includes the development of personnel who are familiar with BCP and manuals for implementing responses to a disaster.
- ☐ (4) Whether the education and training plan includes coordinated training with other related companies.
- ☐ (5) Whether the education and training plan ensures that education and training are conducted periodically (annually, etc.) and after personnel are drastically changed due to organizational change, personnel change, recruitment, etc. or after BCP are reviewed or improved.

5.1.4 Plan for Implementing Reviews and Improvement

- ☐ (1) Whether a review and improvement plan which includes the systems, schedule and procedures for inspecting, reviewing and improving BCM is established.

- ☐ (2) Whether the review and improvement plan is included in the business plan of enterprises as a whole which is approved by the management.

5.2 Documentation of Plans, etc.

- ☐ (1) Whether the plans established in Chapter 5.1 are documented to the necessary extent and detail.
- ☐ (2) Whether (a part of) the BCP to be used in case of emergency, manuals, etc. are distributed to responding persons and whether they are asked to manage such documents properly and keep them ready for use at any time.

6.1 Implementation of Proactive Measures

- ☐ (1) Whether each department in charge and persons in charge implement proactive measures without fail based on a plan for implementing proactive measures.
- ☐ (2) Whether the BCM secretariat manages the progress of proactive measures implemented by each department.

6.2 Implementation of Education/Training

- ☐ (1) Whether training is conducted in cases where participants are unable to attend.

7.1.1 Assessment of Actual Functionality of Business Continuity Plan

- ☐ (1) Whether the enterprise assesses if critical operations will be able to achieve the Recovery Time Objective (RTO) and Recovery Level Objective (RLO) by means of the established BCP.

7.1.2 Inspection and Assessment of Business Continuity Management

- ☐ (1) Whether inspections and assessments are conducted to check whether BCM adapts to, or necessary amendments are made to BCM as a result of a personnel change, change of customers, change of business offices, manufacturing lines and operation implementation methods (including operation process), the commencement of provision of new products or services, a change in business from the conclusion of new contracts, etc., requirements from stakeholders, environmental changes such as revision of laws and regulations, and various other factors.
- ☐ (2) Whether inspections of customers are conducted from the viewpoint of supply chains.
- ☐ (3) Whether inspections and assessments are conducted to determine whether the kinds of anticipated incidents or predicted damage in an enterprise's BCM should be increased or expanded, and whether business fields or business offices subject to BCM should be expanded.
- ☐ (4) Whether an audit of BCM is conducted and its results are reported to the management. (Enterprises which are advanced in terms of BCM are recommended to utilize audits as means of inspecting and assessing BCM.)

7.2 Review by the Management

- ☐ (1) Whether the BCM secretariat, in preparation for the review by the management, compiles the instructions given by the management in the last review; the subsequent progress of BCM; weaknesses, problems and tasks of BCM clarified based on the results of inspection and

training; and the remaining risks, etc. which are not addressed by current measures, and then selects those matters to be judged by the management after discussions with the management.

- ☐ (2) Whether the management allows enough time for receiving explanations from the BCM secretariat, conducts necessary discussions and assessments, and take the initiative to review BCM in order to maintain and improve the enterprise's business continuity capabilities.
- ☐ (3) Whether the management, based on the results of such review, gives instructions on corrective actions which must be implemented without delay and the implementation of countermeasures, and shows the direction of improvement of BCM in future years.

7.3 Correction and Improvement

- ☐ (1) Of the problems identified in the inspection, whether practical problems that do not require management judgment are corrected as soon as possible.
- ☐ (2) For corrective actions, countermeasures and matters to be improved for which instructions are given by the management as a result of the review by the management, whether actions are taken without delay, if possible.
- ☐ (3) If investigation and analyses, the securing of budget, preparations, etc. are necessary for corrective actions, countermeasures and matters to be improved for which instructions are given by the management as a result of the review by the management, whether such measures, etc. are included in the process of continual improvement of BCM and whether the progress of implementation of such measures, etc. is managed by the BCM secretariat.

7.4 Continual Improvement

- ☐ (1) Whether the management, the BCM secretariat and enterprises as a whole assess if BCM is appropriate in light of the enterprise's management policies, business strategies, and the basic policy, purposes, etc. of BCM, whether the scope of application of BCM and covered risks are appropriate, and whether the business continuity strategy and measures are effective. Whether they make continual improvement from these viewpoints.
- ☐ (2) Whether this continual improvement is made in all processes of BCM, including policy, analyses, strategies, plans, implementation and inspections.