Introduction of Research Study

Current Status of Crisis Management in Japan and its Issues

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One key policy issue which must be reconsidered in the post-COVID era is the optimal method of responding to emergency situations. Repeated delays and confusion in the government's initial responses to natural disasters have been brought to the forefront even during the current COVID-19 crisis. How will it be possible to respond to emergencies with sufficient speed, accuracy, and flexibility?

The occurrence of another pandemic, the intensification of weather disasters, massive earthquakes in the Tokyo metropolitan area and Nankai Trough, and destructive cyber-physical attacks. We cannot deny the possibility that these situations may be compounded. The government can no longer afford to revise individual laws separately as stopgap measures whenever a new disaster occurs. Since opinions such as this are now becoming real concerns that must be responded to, it may be necessary to return to the origins of crisis management and shift the paradigm of its policies.

In preparation for fundamental investigations to do so, this research study has attempted to summarize the facts and issues which must be recognized as premises for such discussions. The process and outline of the study are described below.

1. Keywords and issues

The U.S. Federal Emergency Management Agency (FEMA) is consistently pointed out as an ideal example of a crisis management organization. If we first of all outline the main points of this study by looking at the keywords that characterize FEMA, the following can be indicated.

1.1 Conversion to an "all-hazard approach"

In Japan, ministries and agencies with jurisdiction over disasters according to their causes respond according to a vertical hierarchy, based on individual plans. In the United States, responses are based on a single set of organizational action principles regardless of the disaster type, scale, or responding organization ("all-hazard approach").

1.2 Adoption of a functional approach

In Japan's disaster prevention plans, countermeasures and organizations are linked together in designated structures. Therefore, when unexpected situations occur there is a tendency for action to be hindered due to issues with resource allocation. In the United States, the functions to be exercised in an emergency are specifically defined, and responsible agencies are assigned as coordinators within the federal government for each item, so adjustments can be made for the government as a whole to operate effectively.

1.3 Introduction of an Incident Command System

In the United States, a comprehensive on-site coordination system has been standardized. This system is adopted by federal, state, and even municipal governments, making it easier for them to cooperate with each other. It additionally serves as a foundation for education and training programs, allowing large numbers of experts to be developed. In Japan, there is no such standard system. Crisis management is treated as a temporary task and there are hardly any experts available.

2. Confirmation of facts and recognition of issues

"What is the actual situation regarding the above issues?" "What kinds of discussions and investigations have been conducted so far?" In light of questions like these, this project has organized efforts to confirm the relevant facts and identify issues, in relation to the optimal state of organizations, legislation, information systems, and education and training.

2.1 Emergency response organization systems, and the underlying legal system

According to an OECD survey, Japan is not included in the 75% of its member countries that have adopted an all-hazard approach. However, the Cabinet Secretariat, who is responsible for national crisis management, defines emergency situations as "situations that cause or are likely to cause significant damage to the lives, physical health, or property of citizens," and the scope of response measures includes evacuation guidance and disaster relief during conditions such as large-scale natural disasters, serious accidents or incidents, infection by new diseases, and even armed attack situations. This means that the stance of an all-hazard approach is in fact being considered.

However, since large-scale natural disasters have been the greatest cause of human sacrifice and loss in postwar Japan, "disaster prevention" has taken on a central role. Under the leadership of the Cabinet Office (disaster prevention) and the Cabinet Secretariat, an initial response system has been established which includes relevant ministries and agencies, and measures have been taken based on the Basic Act on Disaster Management and individual laws. The Ministry of Health, Labour and Welfare and the Cabinet Secretariat assume a leading position in responding to new infectious diseases, but related measures are according to individual laws just as for natural disasters.

2.2 Examination, proposal, and discussion of the optimal state of emergency response

If we summarize the systems for both types of situations, under which basic local governments and wide-area local governments are connected with the national government, and status reports and command orders are provided even to actual operating institutions and designated public institutions at the same time, it is no surprise to find that they are extremely complex.

State of emergency proclamations and declarations have many common points, although emergency measures are specified by the laws governing each type of event. They are released with great caution while avoiding the imposition of strict restrictions on private rights, and have so far been limited to the 3.11 nuclear disaster and the current COVID-19 crisis.

Individual government agencies have made efforts to improve their fields of responsibility in order to effectively apply lessons from disaster, but this has ironically caused the legal system to become more complicated, making it difficult to comprehensively coordinate initial responses.

Taking care not to overlook such conditions, the government has studied to enact the Basic Act on Emergency Situations and to standardize disaster countermeasures, while also investigating the creation of a centralized organization. Furthermore, researchers have made suggestions based on cases occurring overseas.

2.3 Crisis management DX, the key to optimal response

The information systems of national and local governments must be developed and operated so that specific situations can be consistently and uniformly identified. Development with the goal of DX is advancing from information sharing support to decision-making support, but is awaiting the implementation of investigations on unifying operations and integrating functions with the current system.

2.4 Literacy and communication to be tested by actual situations

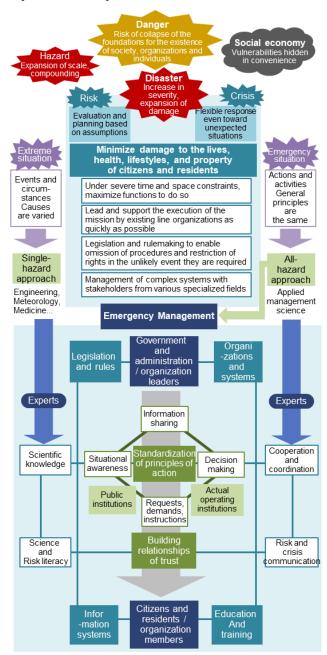
Although efforts will be made to develop local disaster prevention capabilities, there are clear issues regarding cross-functional coordination. Standardizing the establishment of advanced education programs and the improvement of risk communication processes based on management science as in the United States will be the deciding factor, but Japan is lagging behind in this area.

3. Identifying "necessary" and "sufficient" conditions

Based on the above confirmation of facts and recognition of issues, it will be important to standardize principles of action and build relationships of trust as "necessary conditions" for implementing optimal emergency responses, and to develop functional management science items as "sufficient conditions."

3.1 Standardizing principles of action and building relationships of trust

Figure 1 shows the mechanisms for emergency response. The overall mission for incident response should in fact be the minimization of damage to the "lives, physical health, or property of citizens" as defined by the Cabinet Secretariat, and the key to achieving this goal is how to control the functions of the many existing institutions and organizations that are structured in a vertical hierarchy. This will depend on the enhancement of emergency management functions based on management science, a discipline which facilitates overall coordination to bring all available abilities together. In order to exercise these functions, goals such as standardizing the principles of response and building relationships of trust among organizations are essential requirements to be pursued.



Source: Prepared by Hitachi Research Institute from various materials Figure 1 The crisis management mission and necessary conditions

3.2 Enhancing emergency management functions based on management science

Figure 2 shows an attempt to consider sufficient conditions from the perspective of the governance cycle of national resilience.

Key Action Items Required to Strengthen National Resilience SFI Strategic Foresight Initiative Emergency management NRA National Risk Assessment AHBCP All-Hazards BCP **BBBP** Mitigation **Build Back** Preparedness Better Plan Application Disaster Resilient Resto DX•CPS of Digital Twin occurrence Governance -ration Recovery Response ICS Incident Command SRI Sector Recovery Initiatives System Multi Agency System Developing the ability to survive and respond to crisis situations LRA HRM Local Risk Personal Risk Assessment Management Assessment

Source: Prepared by Hitachi Research Institute from various materials Figure 2Sufficient conditions of the crisis management

In the four stages of preparedness, response, recovery, and mitigation, the sufficient conditions for optimal response consist of function-specific plans for actual operations, comprehensive coordination, multi-agency collaboration, recovery of key social functions, and DX. However, careful preparations should be made to be aware of possible unexpected situations and to make preparations for responding to them. National, regional, and individual risk assessments based on scientific evidence are critical points and should be added to the sufficient conditions.

Under the current system and structure, it will be difficult to implement optimal emergency response measures. However, there are also great concerns that even if investigations are conducted on legal and organizational theories from the very beginning, they will not result in the achievement of the goals which should actually be reached. It will first of all be important for existing emergency response departments to apply the process of sharing an understanding of the ideal state of their own management functions, closely examining specific measures that satisfy the requirements for those

functions, and then narrowing them down to systems and structures that consider actual circumstances.

About the Author



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Engaged in activities to propose policies related to social innovation.

After entering Hitachi, Ltd., worked in the Management Planning Division and others before assuming his current position.

Recent research themes include international competitiveness comparisons and public investment trends.