

# **Policy Outline of National Resilience**

## **(Provisional Translation)**

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**National Resilience Promotion Headquarters**

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## **Introduction**

The Second Abe Administration was inaugurated at the end of December 2012. The Cabinet's basic policies incorporate the administration's commitment "to promoting national resilience for preventing disasters in advance through such means as taking countermeasures for aging infrastructure, and expending all possible means for crisis management against large-scale disasters and terror attacks, etc., thereby eliminating the citizens' worries concerning their daily lives and creating a safe society," and the Prime Minister appointed the Minister in charge of Building National Resilience. In January 2013, the National Resilience Promotion Office was set up as an organization to deal with related affairs in the Cabinet Secretariat and concrete initiatives for building national resilience were commenced under Minister Furuya in charge of Building National Resilience.

In March 2013, the Advisory Committee on National Resilience (Disaster Prevention and Mitigation), consisting of experts in various fields and chaired by Mr. Fujii Satoshi (Special Advisor to the Cabinet; Professor, Graduate School of Engineering, Kyoto University), was established. The Advisory Committee has carried out objective professional discussions on national resilience from a broad perspective covering wide-ranging fields, and has widely collected opinions of local people and the general public through prefectures and economic organizations.

Furthermore, as a system to ensure that the relevant ministries and agencies promote initiatives for building national resilience in an integrated manner, the Liaison Conference of Relevant Ministries and Agencies for Building National Resilience (chaired by the Minister in charge of Building National Resilience) was set up. Taking into account the aforementioned discussions by the Advisory Committee, the Liaison Conference compiled basic policies for national resilience, conducted vulnerability assessment on a trial basis, and decided future directions of programs for building national resilience to be prioritized. Based on these, the Liaison Conference has just submitted a budget request for FY2014.

Prior to the enforcement of the Basic Act for National Resilience Contributing to Preventing and Mitigating Disasters for Developing Resilience in the Lives of the Citizenry (hereinafter referred to as the "Basic Act"), the national government has made the aforementioned efforts preliminarily on a trial basis. Based on these efforts, this Policy Outline was compiled as the basic guideline for various measures concerning national resilience. This Policy Outline is in line with the principles of the Basic Act and the policy approaches and serves as the basis for the Fundamental Plan for National Resilience, which is positioned as the guidelines for national plans, etc. relating to the promotion of national resilience in the Basic Act.

The national government will establish measures for national resilience and endeavor to promote them by utilizing this Policy Outline as an important milestone, start reviewing relevant national plans, and work as one to promote initiatives for building a resilient nation in a systematic manner.

## **Chapter 1 Basic Concept**

### **1. Principles of National Resilience**

Japan has repeatedly been hit by a number of large-scale disasters due to its geographical, geomorphic and meteorological features. Large-scale disasters have happened when people least expected them and have caused tremendous human loss and enormous economic, social and cultural damages. However, damage due to disasters varies significantly depending on the preparedness of society. In order to avoid repeating ex post facto measures, i.e., making efforts over years for the recovery and reconstruction from tremendous damage after being hit by a large-scale earthquake or other disasters, it is important to make preparations for large-scale disasters in advance during normal times, squarely facing the possibility of large-scale natural disasters and various other risks. In light of the lessons we learned from the Great East Japan Earthquake, we need to prepare comprehensive measures against large-scale disasters, with the possibility of the worst cases without preconceptions, while incorporating national land policy and industry policy as well, not only limited within the scope of narrowly-defined disaster prevention, as a far-sighted national policy with an eye on the distant future. Through such initiatives for building a resilient nation, we must overcome risks instead of merely being at the mercy of them, to achieve sustainable growth and develop an environment where young people leading subsequent generations can have bright hopes for the future.

For that purpose, we are committed to promoting initiatives for building national resilience with the aim of creating safe and secure national lands, regions, and economic society that have strength and flexibility, even in the event of any disasters. Basic principles therefor are as follows:

- (i) Prevent human loss by any means.
- (ii) Avoid fatal damage to important functions for maintaining administration as well as social and economic systems.
- (iii) Mitigate damage to property and facilities and prevent expansion of damage.
- (iv) Achieve swift recovery and reconstruction.

Through proactively promoting public-private initiatives for building national resilience to secure social and economic systems that will never become dysfunctional in any event, the lives and property of local residents, industrial competitiveness and economic growth can be protected, and at the same time, both the national and local governments and the private sector may also be able to enhance their capacity to address changes in circumstances and increase their productivity and efficiency. Such initiatives will also contribute to the national government's growth strategy by cultivating new markets and expanding investments, thereby playing a part in Japan's economic growth, in enhancing its international competitiveness and winning the trust of the international community.

Therefore, the national government is committed to promoting actions for building national resilience comprehensively, across ministries and agencies, in collaboration with local governments and the private sector.

## **2. Basic Policies and Procedures for Promoting Initiatives for Building National Resilience**

### **(1) Basic Policies**

Based on the principles on national resilience, initiatives for making the entirety of the nations' land territory more resilient to large-scale natural disasters shall be promoted in line with the following policies, while utilizing the experience we have obtained through the Great East Japan Earthquake and other previous disasters. Such initiatives will contribute to disaster prevention and mitigation, swift recovery and reconstruction from disasters and enhancement of Japan's international competitiveness.

Envisaged risks that may affect the lives of the citizenry and the national economy include large-scale accidents and terror attacks, in addition to natural disasters. However, an inland earthquake at the national capital and a Nankai Trough earthquake are predicted to occur in the near future and once such large-scale natural disasters happen, a wide area of national land will be damaged significantly. Therefore, this Policy Outline aims to promote government-wide initiatives for building national resilience first against large-scale natural disasters.

- (i) Strengthen latent strength, resilience, and recuperative power held by social and economic systems of all levels in Japan.
- (ii) Implement measures, while closely examining all aspects of essential factors that may damage Japan's robustness.
- (iii) Implement measures, while comprehensively ascertaining the power of the market, administration and society, with a broad and systematic perspective, and also keeping the ideal systems and regulations to be achieved in mind.
- (iv) Implement measures in a planned manner, while having a long-term perspective and the concept of time management, not from a short-term perspective.
- (v) Have a perspective of preventing excess concentration and creating an autonomous, decentralized and coordinated nation as a result of sharing functions among diversified regions, endeavoring to enhance independence of the respective regions and achieve a national land structure wherein diversified regions cooperate and collaborate with each other.
- (vi) Promote measures effectively by appropriately combining measures for software, such as for providing training and disaster prevention education, and measures for hardware, such as for improving earthquake resistance of facilities and securing replacement facilities, depending on disaster risks and regional circumstances, and develop a system therefor at an early stage.
- (vii) Implement measures in an appropriate combination of self-help efforts, mutual assistance and public help, with the public sector (the national and local governments) and the private sector (residents and private companies, etc.) properly cooperating with each other and sharing roles, with a central role being played by the national government in particularly serious or urgent situations.

- (viii) Strengthen bonds between people and the functions of the communities, and endeavor to develop an environment where actors who promote initiatives for building resilient communities can carry out their activities properly in each region.
- (ix) Implement measures with due consideration to women, elderly people, children, people with disabilities, foreign people, etc.
- (x) Devise measures that not only work well for disaster prevention and mitigation in an emergency but also are utilized effectively even at normal times.
- (xi) Prioritize measures to be implemented intensively in light of expected changes in citizens' demands as a result of a decrease in population, as well as the aging of social capital, etc., while giving due consideration to ensuring implementation of relevant measures on an ongoing basis through effective use of financial funds.
- (xii) Promote measures effectively, while reducing cost through effective use of the existing social capital.
- (xiii) Actively utilize private funding through PPP and PFI in order to make the most of limited funds.
- (xiv) Contribute to effective and efficient maintenance and management of facilities.
- (xv) Promote reasonable use of land from the viewpoint of protecting human lives.
- (xvi) Promote research and development based on scientific knowledge and make efforts for disseminating the outcomes thereof.
- (xvii) Give due consideration to symbiosis with nature and harmony with the environment in accordance with the characteristics of each region.

**(2) Basic Means for Promoting Initiatives – Thorough Implementation of the PDCA Cycle –**

Initiatives for building national resilience represent national risk management and should be promoted nationwide through repeating the following PDCA cycle and always looking back and reviewing the prior process.

- (i) Clarify the final goals and identify and analyze major risks.
- (ii) Analyze and assess risk scenarios and their effects, and identify specific vulnerabilities in light of the goals.
- (iii) Analyze and assess vulnerabilities and consider countermeasures against problems and risks in overcoming the relevant vulnerabilities.
- (iv) Review policies necessary for solving problems, select countermeasures to be prioritized, and implement them in a planned manner.
- (v) Properly evaluate the results and review and improve the initiatives as a whole.

In this process, analysis and assessment of vulnerabilities and establishment of countermeasures against risks should be conducted through a sectoral approach and additionally through a new approach of cross-sectoral government-wide programs (policy packages for achieving goals) by identifying “events that should never happen,” the occurrence of which is particularly supposed to cause fatal damage to the country, and from

the perspective of what we lack at present and what we should do from now on in order to avoid such events or to avoid fatal damage even if any such event occurs. The introduction of such programs is intended to promote organic collaboration among sectors and gradually improve the reach of administrative initiatives currently taken in each sector to allow them to explicitly incorporate various types of risks.

Additionally, through the implementation of the PDCA cycle, initiatives for building national resilience are to be stepped up by way of constantly reviewing programs and selecting and prioritizing measures, improving vulnerability assessment means therefor, enhancing methods of evaluating effects of measures (introduction of Key Performance Indicators (KPI), etc.), setting up goals for each program, and introducing progress management through preparing roadmaps, while making the utmost efforts for visualizing the details and processes of such initiatives.

### **(3) Matters Requiring Particular Consideration**

#### **(Building of Social and Economic Systems from a Comprehensive Point of View)**

Pursuing excessive economic efficiency that only envisages normal times may result in damaging the resilience of Japanese economy and society. Therefore, when intending to build, reform or improve social and economic systems, we need to have a comprehensive point of view in order not only to ensure efficiency at normal times but also to seek long-term efficiency and reasonableness in light of the existence of various types of risks.

#### **(Inducement of Private Investment)**

Comprehensive initiatives for building national resilience from both the software and hardware aspects are expected to create diversified needs in various sectors and will bring about new innovation and expansion of investment, thereby contributing to the sustainable economic development of Japan. In order to promote new innovation and expansion of investment, voluntary capital investment, etc. that contributes to building national resilience should be encouraged and at the same time, infrastructure development and countermeasures for aging infrastructure should be promoted by utilizing PPP and PFI. Additionally, mechanisms that further induce private investment (such as a certification system, regulatory reviews, and use of tax systems) should be embodied steadily.

#### **(Building of Systems by Local Governments, etc.)**

In order to promote initiatives for building national resilience, information sharing and collaboration should be ensured among local governments and between the national government and local governments. The national government will support and promote local governments' efforts to strengthen their structure, such as the fostering of human resources in charge of resilience-building activities, and regional efforts to establish and implement plans for building regional resilience. Furthermore, the national government will provide proper assistance to municipalities so that they can take appropriate measures for residents, depending on risks of disasters, on a timely basis.

**(Promotion of BCP and BCM)**

Organic combination of initiatives taken by the national and local governments and efforts for continuing business activities made by individual companies works to maintain economic activities and enables swift recovery and reconstruction after the occurrence of a large-scale disaster, etc. Therefore, companies' activities for their individual company/business continuity planning in an emergency (BCP) and business continuity management (BCM) should further be facilitated and their efforts for achieving joint BCP and BCM across industry segments beyond the bounds of individual companies should also be promoted, while enhancing support measures and seeking means to build a proper evaluation system. Such positive attitude for BCP and BCM should be firmly established as Japanese business culture with the aim of ensuring resilience of supply chains and enhancing Japanese companies' competitiveness. In light of the fact that many of the products, components and materials of Japanese manufacturing industry play the key role in domestic and overseas supply chains, attention should be paid to diversification of supply sources of materials and components and ensuring emergency power sources for Japanese companies, including SMEs and small businesses, when considering the promotion of BCP and BCM.

**(Risk Communication and Fostering of Human Resources, etc.)**

Each citizen is supposed to play a major role in initiatives for building national resilience, and it is important for the administration to encourage them to voluntarily think about the importance of national resilience not only in response to the unilateral publication of information but also through bi-directional communications with the citizens. For that purpose, the national government will promote a national campaign to foster and ensure human resources who have specialized knowledge and technology concerning disaster prevention and mitigation and to disseminate and implement lessons and knowledge obtained from previous disasters.

**(Promotion of Compilation of Database and Opening of Data)**

Initiatives for building national resilience cover broad fields both in the public and private sectors, including risk communication, maintenance and management of social infrastructure, and research and development in various fields. In order to promote these initiatives efficiently based on data, it is indispensable to integrate information held separately by various entities, including the national and local governments and the public sector, to enable all these entities to have access to such information. Therefore, the national and local governments and the public and private sectors must cooperate and share roles appropriately for promoting sharing and compilation of a database of the information thus currently held separately and for developing a unified platform for this purpose. The disclosure of such data should also be promoted.

**(Measures for the 2020 Olympic and Paralympic Games and Transmission of Information)**

Initiatives for building national resilience represent part of our hospitality to foreign visitors. Safe and peaceful Olympic and Paralympic Games in Tokyo in 2020 will be backed by national resilience. For this purpose, necessary measures will be taken in a comprehensive and systematic manner. The national government will actively provide the international community with information on Japan's initiatives for building national resilience and the outcomes thereof, thereby endeavoring to deepen their understanding that Japan is a country where social and economic activities can be carried out safely.

**(International Contributions through Our Initiatives for Building National Resilience)**

Enhancing resilience of Japan's economic society, which plays a significant role in global supply chains, will also contribute to the growth of the world economy.

In light of the fact that the aging of Japan's social infrastructure, which was intensively developed in and after the high-growth period, will become an issue in the near future, our challenge to ensure national resilience and achieve sustainable economic growth through strategically and efficiently maintaining and renovating such infrastructure as assets to hand down to the future generations is expected to serve as a model for other countries. Additionally, Japan will be required to lead the whole world in the field of technology on disaster prevention and mitigation, based on the know-how which we have accumulated through past experience of various natural disasters, while promoting our efforts for the development of new technology and enhancing technical support for other countries.

From these viewpoints, the national government is committed to deepening mutual understanding with other countries and working together to encourage and inspire each other in various fields concerning national resilience, and to further promoting Japan's initiatives for building national resilience, thereby endeavoring to contribute to the international community.

## Chapter 2 Future Directions for Programs

As mentioned in the Introduction, the national government conducted vulnerability assessment preliminarily on a trial basis, prior to the enactment of the Basic Act. Upon conducting vulnerability assessment, the national government set up the following goals to be achieved in advance for ensuring that Japan's social and economic systems can secure national resilience in the event of a large-scale natural disaster, based on the four basic principles shown in the preceding Chapter.

(Goals)

1. Protect human lives to the utmost extent even in the event of a large-scale natural disaster.
2. Ensure prompt rescue and first-aid activities and provision of medical care from immediately after a large-scale natural disaster (including responses required in the absence of such activities).
3. Secure indispensable administrative functions from immediately after a large-scale natural disaster.
4. Secure indispensable information communication functions from immediately after a large-scale natural disaster.
5. Prevent functional disturbance in economic activities (including supply chains) even after the occurrence of a large-scale natural disaster.
6. Secure minimum networks for electricity, gas, water and sewerage, fuel and transport required for people's lives and economic activities even after the occurrence of a large-scale natural disaster, and seek early recovery of these networks.
7. Prevent any uncontrollable secondary disaster.
8. Develop conditions that enable swift recovery and reconstruction of local society and economy even after the occurrence of a large-scale natural disaster.

Based on the above goals, the national government conducted vulnerability assessment targeting relevant ministries and agencies in April to May 2013, and compiled events for which current measures being taken by each ministry and agency, etc. are not sufficient for making proper responses, based on the results of the vulnerability assessment and the deliberations by the Advisory Committee on National Resilience (Disaster Prevention and Mitigation). 45 events were compiled as events that should never happen as shown in Attachment 1.

In order to avoid these 45 events, a package of measures to be taken jointly across multiple ministries and agencies was established for each event. Such package of measures is called a program for each event and future directions thereof were compiled as shown in Attachment 2.

As these programs directly relate to concrete risks that may be caused by large-scale natural disasters, necessary ones need to be commenced and promoted immediately from

FY2014. All of these 45 programs are important in achieving national resilience, but in light of the significance of the national government's role and the seriousness of the influence and degree of urgency, 15 programs were selected. These 15 programs are to be intensively promoted in particular.

As mentioned above, programs are packages of measures to be taken jointly by multiple ministries and agencies, and none of them can be implemented within the bounds of a single ministry or agency. Therefore, relevant ministries and agencies, as well as local governments, etc., must build a proper system and share data and process control to promote measures, thereby endeavoring to proceed with relevant programs with due consideration given to ensure their effectiveness and efficiency for achieving the goals.

## **Chapter 3 Future Directions for Sectors of Measures**

As mentioned in the preceding Chapter, initiatives for building national resilience are to be promoted jointly by multiple ministries and agencies, based on the 45 programs necessary for avoiding events that should never happen, which were compiled based on the results of the vulnerability assessment, etc.

In the meantime, in order to carry out actions effectively, it is important for each ministry and agency to review their measures taken at normal times, while considering envisaged conditions in an emergency. They need to confirm problems and necessary collaboration in promoting relevant programs for each sector of measures and ascertain what actions are necessary therefor. Therefore, initiatives for building national resilience that are required for promoting the 45 programs and necessary from a longer-term perspective were categorized into 12 individual sectors of measures and three cross-cutting sectors, as shown below.

(Individual sectors of measures)

(i) Administrative functions/Police and fire services, (ii) Housing and cities, (iii) Healthcare and welfare, (iv) Energy, (v) Finance, (vi) Information and communications, (vii) Industrial structures, (viii) Transportation and logistics, (ix) Agriculture, forestry and fisheries, (x) National land conservation, (xi) Environment, and (xii) Land use (national land use)

(Cross-cutting sectors)

(i) Risk communication, (ii) Countermeasures for aging infrastructure, and (iii) Research and development

These 15 sectors were compiled by categorizing necessary measures in light of the goals mentioned in the preceding Chapter, but they are all interdependent. Therefore, relevant ministries and agencies, as well as local governments, etc., must build a proper system and share data and process control to promote measures in each of these sectors, with due consideration given to ensure effectiveness and efficiency of the measures.

Concrete examples of measures in line with the future directions for each sector are shown in Attachment 3.

## **(Future Directions for Individual Sectors of Measures)**

### **(1) Administrative Functions/Police and Fire Services**

#### **(Administrative Functions)**

- The business continuity plan for the national government and that for each ministry and agency should be reviewed and based on the review results, such measures as seismic reinforcement work for government facilities, storage of goods, ensuring of electricity, etc., securing of alternate functions, and preparation of dual communication channels and network bases should be promoted. Training should also be provided and related ministries and agencies are to take further measures jointly as necessary. In that process, reexamination should be carried out with regard to duties to be prioritized in the event of a large-scale natural disaster, as well as interdependency among various duties, a system to supplement required duties, and means to ensure the minimum personnel necessary upon a disaster. Furthermore, efforts should be made to strengthen disaster response capacity through enhancing means for collection and provision of information helpful for taking responses against disasters. [Cabinet Office (Disaster Management); and other relevant ministries and agencies]
- Local governments should be encouraged to establish and improve their own business continuity plans based on actions taken by the national government and relevant ministries and agencies. They are to foster human resources for enhancing their disaster response capacity and build a system for mutual support and collaboration with other local governments and relevant organizations. The national government will offer support for local governments, i.a., for those with fragile frameworks that suffer serious staff shortages on an ongoing basis from normal times, not only in an emergency, with the aim of strengthening systems of local governments. [Cabinet Office (Disaster Management); and other relevant ministries and agencies]

#### **(Police and Fire Services)**

- Bases and routes for activities of the police, fire services, self-defense forces, the Japan Coast Guard, etc., shall be made more disaster-resistant. Furthermore, systems for the Police Disaster Dispatch Unit, Emergency Fire Rescue Unit, TEC-FORCE, FAST-Force, etc. are to be strengthened, and equipment, such as airplanes, ships, vehicles and communication materials, necessary for rescue activities and ensuring access routes should be developed and enhanced, together with disaster prevention information. In particular, due consideration should be given to the development of common communication means. [Cabinet Office (Disaster Management); National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Defense]
- Emergency drills and other training exercises should be organized from the planning stage in collaboration among relevant organizations, and joint drills and systematic and staged training exercises should be conducted under circumstances simulating various scenes of disasters. Collaboration with the private sector, etc. should also be

strengthened and efforts should be made for enhancing local disaster prevention capabilities through improving the system, equipment and drills of fire companies, which are the core of regional disaster prevention activities. Awareness-raising activities concerning flood control companies and voluntary disaster prevention organizations should also be carried out and such activities should be reviewed depending on the changes in society. [Cabinet Office (Disaster Management); National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Agriculture, Forestry and Fisheries; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]

- The central government offices, local governments, the police, fire services, self-defense forces, and the Japan Coast Guard, etc. should endeavor to strengthen their respective response capacity and develop a system for collaboration and adjustment under which comprehensive disaster response measures are to be taken nationwide. At the same time, they should discuss how instruction and supervision should be provided based on basic principles of responses at the time when a declaration of a disaster emergency is issued. Furthermore, a system should be developed for prior adjustment and immigration procedures necessary for accepting emergency aid teams from overseas. [Cabinet Secretariat; Cabinet Office (Disaster Management); National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Justice; Ministry of Foreign Affairs; Ministry of Health, Labour and Welfare; Ministry of Agriculture, Forestry and Fisheries; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]

## **(2) Housing and Cities**

- Goals of countermeasures against large-scale fires in densely-populated urban areas should be steadily achieved by measures such as preventing fire spread, and goals of seismic reinforcement work for houses, buildings and schools, etc. should also be achieved. For these purposes, measures should be taken by appropriately combining the hardware and software aspects. Such measures include the development of shelters and evacuation routes using parks and city streets, promotion of reconstruction and renovation of buildings, use of tax systems, utilization of regulatory methods, establishment of standards, provision of training exercises, and promotion of research and development. Public relations activities and awareness-raising activities targeting residents will be proactively carried out in an easy-to-understand manner, thereby promoting actions effectively inducing reconstruction and renovation of houses and buildings. [Ministry of Education, Culture, Sports, Science and Technology; and Ministry of Land, Infrastructure, Transport and Tourism]
- Based on lessons from the Great East Japan Earthquake, safety measures against long-period ground motions should be promoted for high-rise buildings. Disaster response capacity of multipurpose facilities should also be enhanced through increased collaboration among managers of those facilities and by carrying out joint drills and exercises of efficient evacuation guidance. [Ministry of Land, Infrastructure, Transport

and Tourism]

- Efforts should be made for promoting seismic reinforcement work for routes and facilities for essential utilities (water supply and sewerage, gas, electricity, and communication systems). Disaster resistance should be strengthened by making underground space water-resistant or by introducing a system to automatically stop power supply for preventing electrical fires. Individuals and local governments are to be encouraged to store drinking water and other necessities, and alternate functions are to be secured. In carrying out such actions, relevant areas should be divided into unified blocks. Additionally, by encouraging business operators to establish their own BCP and BCM structures, disaster mitigation measures contributing to swift reconstruction should be promoted. [Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; and Ministry of Land, Infrastructure, Transport and Tourism]
- The public sector and the private sector should cooperate with each other to provide accurate information in the event of a disaster, and make efforts to continue their business in relevant business or commercial zones as a whole and ensure safety of evacuees and those stranded around major stations in metropolitan areas. Furthermore, measures for people stranded due to a disaster should be enhanced through drills and information sharing in advance regarding the possibility of using public and private buildings as temporary shelters. Efforts should also be made for strengthening disaster prevention functions of those shelters through measures such as enhancing their earthquake resistance, increasing storage of necessities, and ensuring alternate water sources, while trying to make towns more compact, in light of population aging in urban areas, so that elderly people can have access to important facilities within walking distance and live independently even in the event of a disaster. [Cabinet Secretariat; Ministry of Land, Infrastructure, Transport and Tourism; and other relevant ministries and agencies]

### **(3) Healthcare and Welfare**

- A disaster may generate a large number of victims. In order to ensure that those disaster victims can receive necessary services, healthcare and welfare functions are to be made more disaster-resistant, through such efforts as improving earthquake resistance of medical and welfare facilities, promoting relocation from areas expected to be flooded in the event of a Nankai Trough earthquake, offering backups for information communications that support medical and welfare functions, and ensuring emergency power generation, alternate water sources, and storage of water, food and other necessities, as well as through building a broad-based collaboration system for appropriate allocation of medical resources, including materials, equipment, and personnel. [Ministry of Health, Labour and Welfare]
- In order to avoid an absolute lack of medical services in the event of a large-scale natural

disaster, the Ministry of Health, Labour and Welfare will provide training for fostering staff of the Disaster Medical Assistance Team (DMAT), who will play the central role in medical rescue, enhance drills in organized collaboration among assistance teams, and actively deploy them to hospitals that serve as disaster centers. Furthermore, the ministry will ascertain local medical needs that are required after emergency activities and build a nationwide support system that incorporates a mechanism to appropriately allocate medical resources and make adjustments. [Ministry of Health, Labour and Welfare]

- In order to ensure that medical facilities that serve as comprehensive disaster centers in each prefecture can accept patients, including severe patients, the use of medical treatment units (medical modules), also at normal times, is to be considered. Measures to avoid an absolute lack of medical functions and personnel should also be promoted by allocating necessary materials and equipment to local medical organizations, such as hospitals that serve as disaster centers and municipalities that will establish first-aid centers, and by enhancing various types of medical training courses. Furthermore, collaboration between medical organizations and transport/logistics business operators should be strengthened to ensure early opening of access routes for patients and medicines and prompt resumption of distribution of medical materials. [Cabinet Office (Disaster Management); Ministry of Health, Labour and Welfare; and Ministry of Defense]
- In order to prevent outbreak and spread of infectious diseases due to a disaster, the Ministry of Health, Labour and Welfare will conduct sterilization and pest control based on the Act on Prevention of Infectious Diseases and Medical Care for Patients Suffering Infectious Diseases, and will provide vaccination based on the Preventive Vaccinations Act. [Ministry of Health, Labour and Welfare]
- Through promoting collaboration between the medical care sector and the nursing care sector from normal times, the Ministry of Health, Labour and Welfare will endeavor to build the integrated community care system, thereby developing an environment that encourages elderly people to participate in community activities and enhance disaster response capacity of respective communities. [Ministry of Health, Labour and Welfare]

#### **(4) Energy**

- Disaster response capacity of each facility should be strengthened, and both the supply side and the demand side of energy should take comprehensive measures to ensure mutual support and unity, thereby seeking to enhance resilience of the energy supply chain as a whole. [Relevant ministries and agencies]
- While trying to ensure the necessary energy supply even in the event of large-scale damage, the supply side needs to establish their concept of prioritization of supply destinations on the premise that supply will be limited after receiving damage. They must ascertain projected demand based on the demand side's BCP and BCM and examine required oil reserves as well as systems and routes for energy supply in an emergency so that they can surely supply necessary energy even in the event of a large-scale natural

disaster. Additionally, they should endeavor to maintain and strengthen declining supply capacity of terminals (service stations, etc.). The demand side should also be encouraged to store energy by themselves. Introduction of independent and distributed energy, such as cogeneration, fuel cells, and renewable energy, should be promoted locally. [Ministry of Economy, trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; Ministry of the Environment; and other relevant ministries and agencies]

- As damage to a complex or other energy supply facilities may not only cause disruption of energy supply but also lead to a large-scale fire, their disaster resistance needs to be enhanced and strengthened disaster prevention systems need to be put in place. Additionally, the infrastructure for road and marine transport of energy should be improved and the disaster response capacity of the transport system needs to be strengthened. [Ministry of Internal Affairs and Communications; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and other relevant ministries and agencies]
- The supply side is to be encouraged to create a joint BCP and BCM structure across multiple companies and promote mutual cooperation on an ongoing basis. Relevant organizations should conduct joint drills to ensure supply chains in an emergency and reflect the results in their countermeasures. They should thus endeavor to further strengthen their functions through the use of the PDCA cycle and promote technological development. [National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Defense; and other relevant ministries and agencies]
- With the aim of making the entirety of the energy supply-demand structure more resilient, the Ministry of Economy, Trade and Industry will promote examination on multilateralization and diversification of domestic and overseas supply sources, in light of medium- to long-term trends of energy supply and demand, domestic and overseas circumstances, and disaster risks in coastal areas. Means therefor may include intensive measures concerning the national energy infrastructure and distribution networks that enable mutual accommodation between regions, promotion of regionally dispersed power sources, and ensuring of domestically produced energy (such as methane hydrate and use of thermal energy). [Ministry of Economy, Trade and Industry]

## **(5) Finance**

- Financial institutions, etc. are required to reliably maintain their functions of making settlement and supplying cash even in the event of various natural disasters, including large-scale complex natural disasters. The national government and the central bank will collect and provide information accurately and promptly to maintain financial orders, thereby mitigating credit uncertainty over financial settlement functions in Japan and avoiding systemic risk or other financial crisis. [Financial Services Agency; Ministry of Finance; and other relevant ministries and agencies]

- In order to ensure that financial services are provided for sure, financial institutions should improve disaster resistance of their buildings, etc., try to secure power sources and information communication functions in an emergency, and establish and enhance their BCP and BCM structures. In that process, they should pay attention to ensure backup functions of their systems and secure personnel (major staff). [Financial Services Agency; and other relevant ministries and agencies]
- Relevant organizations, including the national government and the central bank, should carry out joint drills in a cross-sectoral manner and reflect the results in their countermeasures. In this manner, they should further enhance the effectiveness of their BCP and BCM structures, accumulate know-how, and promote collaboration among related financial institutions. In that process, various circumstances, such as concurrent damage to multiple financial bases, shortage of personnel (major staff), and long-term disruption of the power supply and transport infrastructure, should be envisaged in order to ascertain vulnerability of the entirety of the financial system. [Financial Services Agency]

#### **(6) Information and Communications**

- A well-balanced mechanism of “autonomy, decentralization, cooperation and consolidated operation” should be built on the premise that social infrastructure in the field of information and communications is interdependent. For that purpose, such interdependency should be visualized, and vulnerability of the information communications system against long-term disruption of the power supply, which has not been supposed up till now, need to be assessed. Measures should be taken immediately based on the results of the assessment. [Cabinet Office (Disaster Management); National Police Agency; Financial Services Agency; Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]
- Through the use of geospatial information and ICT, etc., diversified means for collecting disaster information both from the public and private sector should be ensured. At the same time, diversified means for providing such information, including joint use, etc., should also be ensured so that all citizens can dependably obtain accurate information. As a means to ensure information transmission in an emergency, mutual collaboration between the information communications infrastructure possessed by the public sector and that possessed by the private sector should also be sought. Furthermore, relevant organizations should promote development of radio transmitting stations, emergency power supply systems and other backup facilities as countermeasures against poor radio reception or as countermeasures against disasters. [Cabinet Office (Disaster Management); National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology;

Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]

- Countermeasures against disasters should be promoted steadily in each region as high priority efforts, and the disaster resistance of power facilities and transmission facilities/networks themselves needs to be enhanced. Information and communications facilities and equipment should be improved by preparing emergency power supply equipment and fuel storage facilities, etc. [Cabinet Office (Disaster Management); National Police Agency; Financial Services Agency; Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]
- An information collection/analysis system should be created concerning social infrastructure that actively utilizes sensors, image information systems, and other ICT, with the aim of enabling early implementation of efficient countermeasures for aging infrastructure and maintenance and management thereof. Such system should also be utilized for providing evacuation guidance in an emergency. Additionally, research and development should be carried out and related regulations should be reviewed for the purpose of enhancing disaster measures and maintenance and management technology that utilizes various types of information on social infrastructure. [National Police Agency; Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of Defense]

#### **(7) Industrial Structures**

- In light of the actual structure of respective supply chains, such as those where the production of some core materials is concentrated in certain factories or business establishments, efforts should be promoted to enhance disaster resistance of industrial equipment, including equipment within a production line, etc. The infrastructure of the logistics system and energy supply that support the industry and supply chains as a whole should also be made more disaster-resistant. Furthermore, relevant organizations should promote deliberations concerning means to ensure substitutability, such as dispersion and relocation of factories and business establishments, thereby endeavoring to build disaster-resistant industrial structures. [Ministry of Economy, Trade and Industry; and Ministry of Land, Infrastructure, Transport and Tourism]
- Each company is to be encouraged to make efforts to ensure emergency power supply facilities necessary for continuing its industrial activities, and large companies and SMEs should cooperate with each other to build a mechanism to accommodate privately-owned electrical power facilities, fuel storage and procurement, etc. among

affiliated companies and within regions. In building such mechanism, attention should be paid to business types and processes that need to be supplied with power constantly for achieving swift recovery and reconstruction of relevant regions. [Ministry of Economy, Trade and Industry]

- Considering the circumstances where the international division of labor has further progressed and supply chains have become globalized, private companies and economic organizations are to be encouraged to cooperate with each other and establish business continuity plans in a group or in a certain business field, while taking into account the activities outside disaster-affected areas and global supply chains, including overseas production bases. [Cabinet Office (Disaster Management); Ministry of Economy, Trade and Industry; and other relevant ministries and agencies]
- In order to encourage individual companies to establish their BCP and BCM structures and enhance their effectiveness, common guidelines should be revised in light of the trends of international standards. Manuals on how to establish BCP and BCM structures should be prepared as necessary depending on business types and modes and awareness-raising activities should be carried out to disseminate such guidelines and manuals. Business operators are to be encouraged to establish plans that concretely specify means to secure personnel (major staff), promote human resource development through ongoing education and training, and ensure safety for risk assessment. They are also to be encouraged to enhance the effectiveness of such plans by implementing the PDCA cycle every year. [Cabinet Office (Disaster Management); Ministry of Economy, Trade and Industry; and other relevant ministries and agencies]
- In order to further enhance effectiveness of individual companies' BCP and BCM structures, regional business continuity plans (provisional title) should be established for each regional block through collaboration of relevant ministries and agencies, their regional branches, local governments and economic organization, etc. [Cabinet Office (Disaster Management); Financial Services Agency; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; and other relevant ministries and agencies]

#### **(8) Transportation and Logistics**

- Disaster resistance of transportation/logistics facilities should be enhanced depending on regional characteristics of disasters. In particular, with regard to transportation networks in metropolitan areas, where main arteries and hubs for the flows of people and goods and central administrative functions are concentrated, disaster preparedness should be ensured promptly in accordance with the characteristics of each region regarding earthquakes, tsunamis, floods, and other disasters. Such efforts should be promoted not only on the hardware aspect (development of facilities) but also on the software aspect (enhancement of road/maritime/air traffic control, strengthening of training, and promotion of research and development). As an incentive to facility managers, the establishment of a mechanism to publicize the progress in efforts to enhance disaster

resistance of facilities should be discussed. [National Police Agency; Ministry of Education, Culture, Sports, Science and Technology; and Ministry of Land, Infrastructure, Transport and Tourism]

- With regard to main arteries and hubs for the flows of people and goods that support the economy of Japan, alternate transportation routes from the broad-based perspective and narrowly focusing on specific areas should be ensured on the premise that the arteries may be disrupted or the hubs may become dysfunctional due to any large-scale natural disaster. In particular, as one of the alternate transportation routes for the vital east-west main artery, which is the core of Japanese economic society, the project of the Linear Chuo Shinkansen is being promoted for ensuring interconnection and substitutability among different transport modes, from a national perspective, with the aim of bringing about innovation in the national land structure due to the linear trains' ultrahigh speed. JR Tokai, which is the responsible entity, will promote this project in collaboration and cooperation with the national and local governments. Additionally, the Ministry of Land, Infrastructure, Transport and Tourism will endeavor to steadily develop expressway networks, including the Shin Tomei Expressway. [Ministry of Land, Infrastructure, Transport and Tourism]
- When developing alternate transportation routes, transportation/logistics business operators should develop necessary hardware by properly ascertaining required capacity and functions, and at the same time, they should make sufficient preparations concerning the software aspect, such as the strengthening of collaboration with other business operators, enhancement of their BCP and BCM structures, and provision of training, so that alternate transportation can be commenced promptly after the occurrence of a disaster. [Ministry of Agriculture, Forestry and Fisheries; and Ministry of Land, Infrastructure, Transport and Tourism]
- Disaster response capacity needs to be strengthened, while fostering personnel and improving materials and equipment, so that each transportation infrastructure mode can be reopened and recovered at an early stage. In order to ensure smooth allocation of required personnel and goods to disaster-affected areas appropriately in response to various circumstances, a system for collaboration among the private sector and managers of facilities for ensuring access routes, recovery, and transport needs to be strengthened. The Ministry of Land, Infrastructure, Transport and Tourism will also promote measures to eliminate power poles, etc. [Ministry of Land, Infrastructure, Transport and Tourism]

#### **(9) Agriculture, Forestry and Fisheries**

- In the event of a large-scale natural disaster that affects broad areas, it is necessary not only to ensure supply of emergency food, etc. to disaster-affected areas immediately after the disaster, but also to secure production, processing and distribution of food, etc. nationwide thereafter and maintain a system of stably supplying such necessities. For that purpose, relevant organizations should conduct vulnerability assessments and implement hardware measures (development of production infrastructure, etc.) and

- software measures (establishment of BCP/BCM structures and collaboration among companies at the distribution and processing stages), aiming to enhance the disaster response capacity of a series of supply chains. [Ministry of Agriculture, Forestry and Fisheries; and Ministry of Land, Infrastructure, Transport and Tourism]
- Considering the fact that natural disasters happen frequently in recent years, relevant organizations should cooperate with each other and strengthen efforts for disaster prevention and mitigation by combining measures for hardware and software. Such measures include the development of facilities and forests for protecting human life and property and for preventing and mitigating secondary damage in rural areas, as well as the preparation and dissemination of hazard maps. [Ministry of Agriculture, Forestry and Fisheries; and Ministry of Land, Infrastructure, Transport and Tourism]
  - By promoting continuation of agricultural and forestry activities in rural areas and properly maintaining farmland and forests, devastation of farmland and forests should be prevented so that they can properly function to preserve national land. In that process, local communities should be fully utilized and efforts should be made for promoting active use of wood produced locally and technological development of civil engineering methods using wood. [Ministry of Agriculture, Forestry and Fisheries; Ministry of the Environment; and other relevant ministries and agencies]
  - Introduction of renewable energy should be promoted so that an energy system featuring autonomy, dispersion, and collaboration may be established using biomass, water, land and other resources in rural areas. [Ministry of Agriculture, Forestry and Fisheries; and Ministry of the Environment]

#### **(10) National Land Conservation**

- To respond to earthquakes, tsunamis, floods, tidal waves, volcanic eruptions, sediment disasters and other national disasters, comprehensive measures should be taken by effectively and efficiently combining software measures, such as the development of facilities and creation of tsunami-resistant communities, the preparation and dissemination of hazard maps, and proper information transmission in the event of a disaster. Efforts should be made to minimize damage due to a disaster exceeding the envisaged scale or a disaster that occurs while such measures are still in preparatory stages. In this process, existing facilities should be fully utilized by such means as effectively managing water gates and making drainage pump stations water-resistant and earthquake-resistant, and due consideration should be given to effective use of hydro-energy, collaboration with local communities, symbiosis with nature, and harmony with the environment. [Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; and Ministry of Land, Infrastructure, Transport and Tourism]
- An effective and efficient system for managing and renewing social infrastructure should be developed through utilization of non-destructive testing technique, robot technology, and ICT, as well as through upgrading of information regarding the lifecycle of social

infrastructure. At the same time, research and development should be promoted for observation and forecast of meteorological phenomena, earthquakes/tsunamis, and volcanic eruptions. Furthermore, a system should be developed for securing and fostering personnel and communities that play central roles in the conservation of national land, in addition to promotion of technology development. [Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; and Ministry of Land, Infrastructure, Transport and Tourism]

#### **(11) Environment**

- Functions of coastal forests, marshes and other natural environments at normal times and in an emergency (disaster prevention and mitigation functions) should be assessed and disaster prevention and mitigation measures should be promoted, while actively utilizing the natural environment, depending on the characteristics of each region. [Ministry of Agriculture, Forestry and Fisheries; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of the Environment]
- The Ministry of the Environment will promote measures, with the aim of building a waste treatment system that enables swift and proper treatment of disaster waste by region, in collaboration among related parties, through such means as renovating waste treatment facilities in a planned manner, securing a wide-area waste treatment system, developing stock yards for provisional storage of disaster waste, and securing materials and equipment helpful in the event of a disaster. Additionally, the ministry will build a system for properly treating sewage even in the event of a disaster. [Ministry of the Environment]
- In order to prevent environmental pollution and health hazards due to discharge or leakage of hazardous materials in the event of a disaster, a system should be developed for relevant ministries and agencies and local governments to cooperate with each other and take proper responses, with regard to the sharing of information on storage of hazardous materials and on how to monitor and prevent the spread of discharged or leaked hazardous materials. [Ministry of the Environment; and other relevant ministries and agencies]

#### **(12) Land Use (National Land Use)**

- With the aim of creating an autonomous, decentralized and coordinated nation, the national land structure should be changed into the one wherein various regions enhance their autonomy and properly share national and social functions and the whole nation can take responses in coordinated yet organic cooperation. [Relevant ministries and agencies]
- In order to ensure that each region can properly maintain and secure various national and social functions, in accordance with the types and frequencies of the natural disasters to which it is vulnerable, and according to the significance of respective functions, mutual

- cooperation should be strengthened among regions and companies in order to share necessary functions and provide backup. [Relevant ministries and agencies]
- Considering types and frequencies of natural disasters and geographical and geological conditions of respective regions, efforts should be made for making safe communities, while discussing various measures flexibly combining those for preventing damage to facilities and those for regulating and guiding land use, with an eye on the recovery and reconstruction stage after a disaster. [Cabinet Office (Disaster Management); Ministry of Agriculture, Forestry and Fisheries; Ministry of Land, Infrastructure, Transport and Tourism; and Ministry of the Environment]
  - Local governments should seek cooperation of the national government and the private sector and endeavor to secure sites to be used for shelters or bases for rescue activities in the event of a large-scale natural disaster and sites for building temporary housing, in advance. Furthermore, cadastral maps should be developed based on cadastral surveys for ensuring smooth recovery and reconstruction work after a disaster. [Cabinet Office (Disaster Management); Ministry of Justice; Ministry of Land, Infrastructure, Transport and Tourism; and other relevant ministries and agencies]
  - The administration, residents, researchers and other related parties should act cooperatively in strengthening risk communication and human bonds and creating unified communities. [Relevant ministries and agencies]
  - In rural villages whose functions have deteriorated due to depopulation and population aging, relevant organizations should endeavor to enhance and maintain regional functions by strengthening collaboration between villages or by relocating or reorganizing village, based on the opinions of local people. For villages that may be isolated due to a disaster, they should be made resistant to isolation without help from other regions by such means as increasing storage, depending on village size. [Cabinet Office (Disaster Management); Ministry of Internal Affairs and Communications; Ministry of Agriculture, Forestry and Fisheries; and Ministry of Land, Infrastructure, Transport and Tourism]

## **(Future Directions for Cross-cutting Sectors)**

### **(1) Risk Communication**

- Voluntary efforts should be promoted through bi-directional communications, encouraging participation of all related parties, including the national and local governments, citizens, and companies, based on the concept of self-help efforts, mutual assistance and public help. At the same time, disaster prevention education at schools should be enhanced and all citizens are to be provided with education and training for raising awareness of national resilience throughout their lives. In this manner, relevant organizations should make efforts for building risk-resilient economic society and mitigating damage. [Cabinet Office (Disaster Management); Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and

- Industry; and Ministry of Land, Infrastructure, Transport and Tourism]
- In local communities, which are the basis for promoting risk communication, increasing residents' social involvement and strengthening regional power will work to enhance disaster response capacity and heal the mental scars after a disaster through mutual aid and collaboration among residents. Considering the significance of such effects, necessary measures are to be promoted. [Cabinet Office (Disaster Management); Ministry of Education, Culture, Sports, Science and Technology; Ministry of Health, Labour and Welfare; Ministry of Agriculture, Forestry and Fisheries; and Ministry of Land, Infrastructure, Transport and Tourism]
  - With the participation of learned persons, local communities, and people from private companies, etc., the national government will take the initiative in establishing and holding the Liaison Conference as the core of the efforts for strengthening risk communication. The national government will also promote the development of the content and integration of information for raising citizens' awareness of national resilience, and offer support for fostering leaders with accurate understanding of knowledge from previous disasters and with practical ability to take actions. [Cabinet Office (Disaster Management); Ministry of Internal Affairs and Communications; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Land, Infrastructure, Transport and Tourism; and other relevant ministries and agencies]
  - Relevant ministries and agencies should promote measures for disseminating goods and services that contribute to building national resilience in an easy to understand manner so as to induce private investment in various related fields. [Relevant ministries and agencies]

## **(2) Countermeasures for Aging Infrastructure**

- In light of the expected rapid aging of the existing infrastructure, and from the perspective of protecting human life and preventing social and economic systems from becoming dysfunctional, relevant ministries and agencies should steadily carry out maintenance and renewal of the infrastructure, while seeking reduction and leveling of the total cost in the medium- and long-term. [Relevant ministries and agencies]
- Relevant ministries and agencies should make plans for prolonging the lifetime for each facility and establish the PDCA cycle for checking, diagnosis, repair, renewal, and compilation of information. [Relevant ministries and agencies]
- Development of new technologies and cross-sectoral use thereof should be promoted. New technologies include those for checking and diagnosis, such as non-destructive testing technique, and those for prolonging lifetimes upon construction or renewal of facilities, such as research of new materials and repair/strengthening techniques. [Relevant ministries and agencies]
- In a public-private collaboration, relevant ministries and agencies should build a system to support initiatives for building national resilience, such as for strengthening research systems and fostering engineers who will engage in management and renewal of the

infrastructure. [Relevant ministries and agencies]

### **(3) Research and Development**

- Education/research organizations and private companies should endeavor to foster excellent human resources and relevant ministries and agencies should promote innovation for building national resilience in all sectors of measures by introducing incentives for research and development. Furthermore, by encouraging dissemination and utilization of excellent techniques, they should actively contribute to responding to recurrent natural disasters and solving technical problems in countermeasures for aging infrastructure. [Relevant ministries and agencies]
- Research and development by research organizations and private companies should be promoted. In that process, effective and efficient means for research and development should be sought by promoting diversion of national resilience-related R&D activities to other purposes and utilization of the results of research and development for other purposes in various national resilience-related fields. [Relevant ministries and agencies]

## **Conclusion – For Building National Resilience –**

Initiatives for building national resilience represent, in part, works to reorganize various measures that have so far been taken independently by each ministry and agency into unified initiatives under common goals. Relevant ministries and agencies are required to carry out necessary measures in a planned manner under an effective cooperative system beyond their bounds. It is also essential for them to implement the PDCA cycle and sequentially step up their initiatives by such means as constantly reviewing prioritization of their measures, improving vulnerability assessment methods, introducing progress management based on roadmaps, and visualizing the details of the initiatives. Based on this concept, measures are to be promoted properly.

National resilience cannot be achieved solely by the national government. It is indispensable to collect the wisdom of all related parties, including local governments and the private sector, and mobilize the full potential of the whole nation. Each citizen must hand down the spirit of self-help efforts and mutual assistance from generation to generation, that is to protect oneself instead of counting on others and to help each other, while considering what one can do in the community. To develop a culture where all citizens act independently in this manner will be the basis of the initiatives for building national resilience.

For that purpose, the national government will endeavor to make the policies indicated in this policy outline understood properly and disseminated and reflected broadly in the code of conduct of the private sector and the citizenry as a whole. The national government will establish the Fundamental Plan for National Resilience based on the Basic Act and also support and promote the establishment and implementation of Fundamental Plans for Regional Resilience by prefectures and municipalities nationwide, with the aim of having them reflected in other national and local plans to enhance national resilience-related initiatives, thereby steadily achieving the goal of building a nation resilient to various risks.