

Emergency response measures by the government at the time of disaster



Standards for the calling of emergency response team (at the time of natural disasters)

- Earthquake of **intensity upper-5 or greater** in 23 wards of Tokyo
- Earthquake of **intensity lower-6 or greater** in other areas
- Announcement of tsunami warning (big tsunami)
- Announcement of Tokai Earthquake advisory

At the time of large-scale earthquakes such as the Tokyo Inland Earthquake (**intensity upper-6**),

Method of calling: all Cabinet members must gather quickly by any available means

- ① Prime Minister's Office (Crisis Management Center)
- ② Cabinet Office (Joint Government Building)
- ③ Ministry of Defense (Central Command Post)
- ④ Tachikawa Wide-area Disaster Management Base (Disaster Management Back-up Facility)



Meeting of Major Disaster Management Headquarters (2014 Landslide damage in Hiroshima)



Local investigation of the typhoon 10 of 2016

Reception/transmission of disaster information

- Establishment of Prime Minister's Office for Disaster Management
- Simultaneous call to emergency response members and all ministries/agencies

- Analysis of situation, summarizing and coordination of emergency response measures by the **emergency response team**
- Discussion of measures under the leadership of the Minister of State for Disaster Management

Emergency response team: Deputy Chief Cabinet Secretary for Crisis Management (leader), director-generals of related ministries/agencies

- Decision of dispatch of the **initial emergency survey team** and **government investigation team**

Establishment of headquarters and decision of the government's countermeasure policies by the Extraordinary Cabinet Meeting

Establishment of Major Disaster Management Headquarters

(Chief: Minister of State for Disaster Management)

Establishment of Extreme Disaster Management Headquarters

(Chief: Prime Minister)

Dispatch of the government investigation team

Chief: **Minister of State for Disaster Management or Vice**

Minister of the Cabinet, Parliamentary Secretary

Members: Division-directors of related ministries/agencies

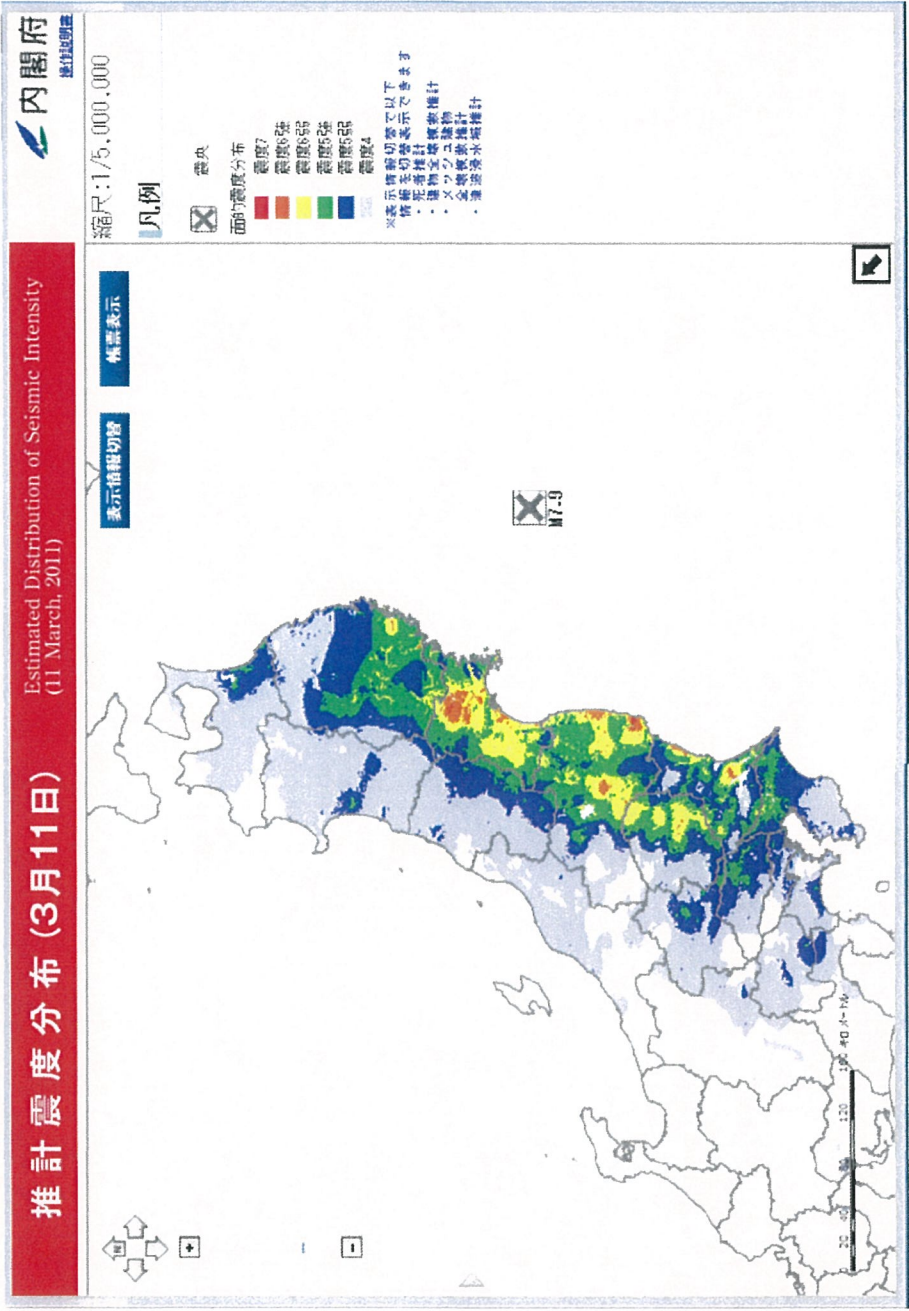
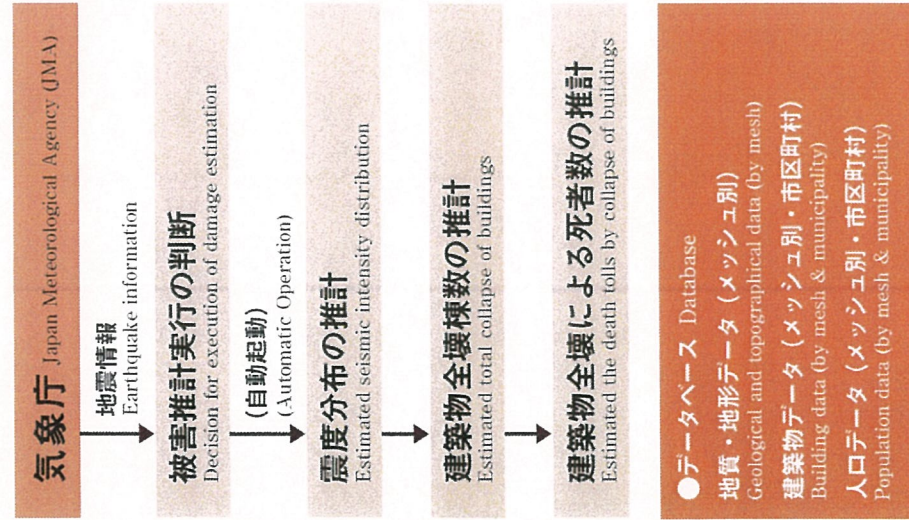
System for Estimating Earthquake Damage

推計機能

Function of Estimation

東日本大震災時における推計結果の一例

Estimation of Earthquake Seismic Intensity Distribution in Great East Japan Earthquake



Establishment of Government Management Headquarters

| | Extreme Disaster Management Headquarters | Major Disaster Management Headquarters |
|----------------------------|---|---|
| Criteria for Establishment | Significantly Abnormal and Devastating Disasters Very large and rare disaster of the scale of the Great Hanshin-Awaji earthquake *2011 Great East Japan Earthquake | Emergency Disaster Generally with more than 100 people dead or missing (also considering the number of homes destroyed) *2016 Kumamoto Earthquake 2014 Mt. Ontake Eruption, 2014 Landslide damage in Hiroshima, etc. |
| Establisher | Prime Minister (Cabinet Decision required) | Prime Minister |
| Chief | Prime Minister | Minister of State (Minister for Disaster Management) |
| Deputy Chief | Minister of State (Minister of State for Disaster Management or Chief Cabinet Secretary) | Cabinet Secretary, designated administrative agency officials or designated local government agency directors or officials as appointed by the Prime Minister (Cabinet Office Deputy Minister or Ministerial Secretary) |
| Members | <ul style="list-style-type: none"> - All State Ministers - Deputy Chief Cabinet Secretary for Crisis Management - Deputy Ministers or other designated administrative agency directors other than the Minister of State appointed by the Prime Minister (Cabinet Office Senior Vice-Minister (for Disaster Management)) | Cabinet Secretary, designated administrative agency officials or designated local government agency directors or officials as appointed by the Prime Minister (Director level of relevant Ministries) |
| Secretary General | Cabinet Office Director-General for Policy Planning (for Disaster Management) | |
| Jurisdiction and Authority | <ul style="list-style-type: none"> - Create policies to smoothly and quickly implement disaster response measures - Overall coordination of disaster response - Implementation of necessary emergency measures - Provide necessary direction to designated local government agencies, local governments, and designated (local) public institutions (under the authority of the Chief) - Provide necessary direction to designated administrative agencies (authority executed only by the Chief of the Extreme Disaster Management HQ) etc. | |

Establishment of Government Management Headquarters – On-site

| Local Management Headquarters for Extreme Disaster/Major Disaster | |
|--|---|
| Establishment Criteria | Where there is a particular need for the establishment of a mechanism for the promotion of emergency disaster response measures in affected areas and for coordination between the affected area and the Extreme Disaster Management HQ etc. |
| Chief | Cabinet Office Deputy Minister, Cabinet Office Parliamentary Secretary etc. |
| Main Roles | <p>1) Grasp damage conditions and responses to affected areas and communicate these to the HQ and relevant organizations etc.</p> <p>2) Grasp demands from affected areas and transmit these demands to the HQ, coordination with local governments in affected areas, communication to affected areas about measures implemented by the national government</p> <p>3) Coordination and communication of the transportation and supply of personnel and resources for the support of the national government or organizations etc. that have applied to the national government</p> <p>4) Coordination and communication related to shelters for evacuees, utilizing national facilities</p> <p>5) Coordination related to the establishing of flight security in the affected areas</p> <p>6) Coordination and communication of schedules etc. related to government investigative teams, field surveys and field visits by government officials such as ministers</p> |

[Note]

- Cabinet decision established a local HQ in Hyogo Prefecture at the time of the Great Hanshin-Awaji Earthquake
 - (1) Coordination with local governments in affected areas
 - (2) Collection, processing and transfer to Tokyo HQ of on-site information and requests for support
 - (3) Provision of information and PR to local areas of national measures
 - (4) Support and cooperation on measures by local governments in affected areas such as the removal of rubble etc.
- Based on the above roles played, the Disaster Countermeasure Basic Act was amended to provide for the statutory establishment of local response HQ
- Responded to the Great East Japan Earthquake by establishing a local HQ in Miyagi Prefecture

Overview of Large-scale Earthquake Disaster Management Measures

Super wide-area earthquake that affects the entire west Japan

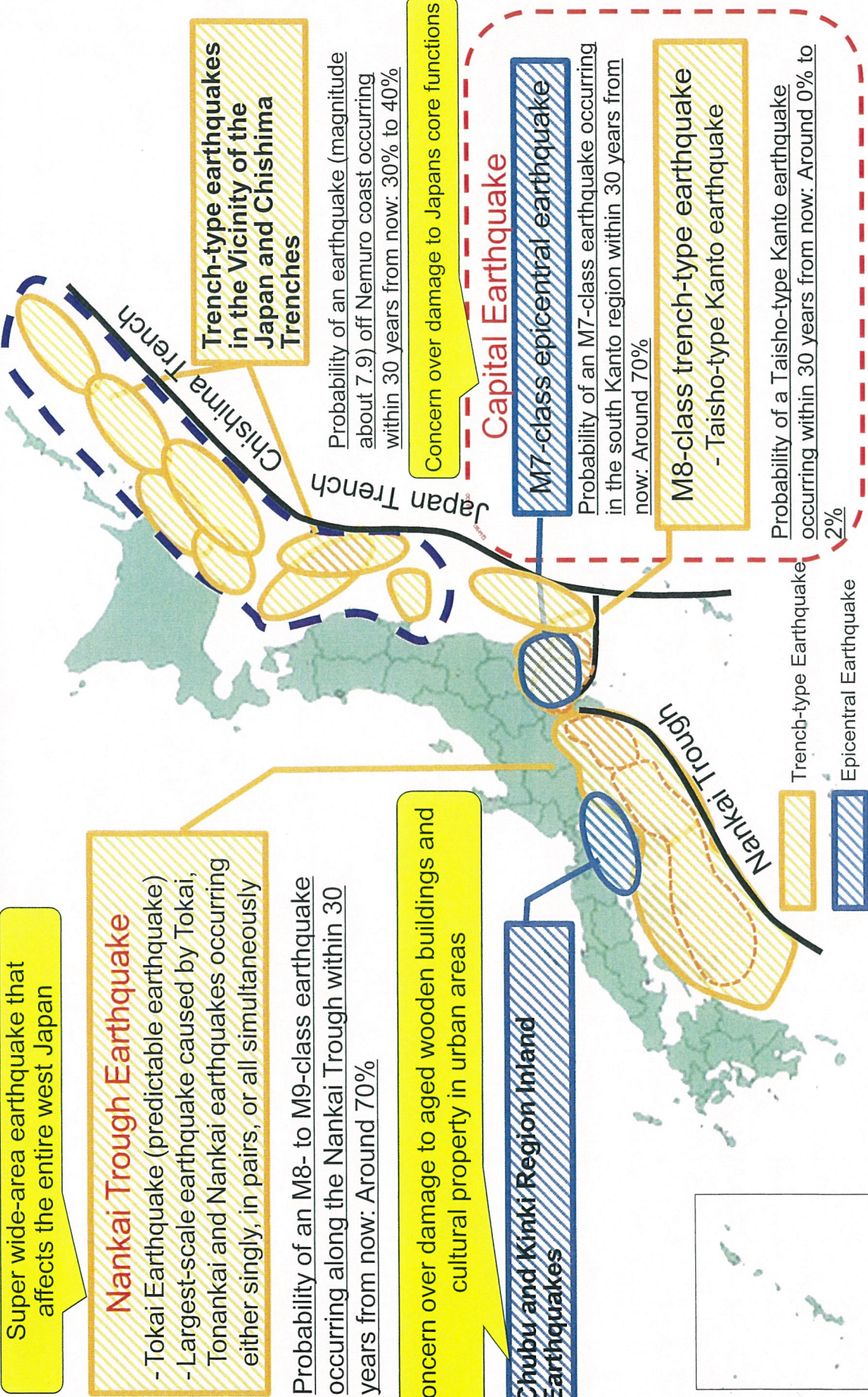
Nankai Trough Earthquake

- Tokai Earthquake (predictable earthquake)
- Largest-scale earthquake caused by Tokai, Tonankai and Nankai earthquakes occurring either singly, in pairs, or all simultaneously

Probability of an M8- to M9-class earthquake occurring along the Nankai Trough within 30 years from now: Around 70%

Concern over damage to aged wooden buildings and cultural property in urban areas

Chubu and Kinki Region Inland Earthquakes



Trench-type earthquakes in the vicinity of the Japan and Chishima Trenches

Probability of an earthquake (magnitude about 7.9) off Nemuro coast occurring within 30 years from now: 30% to 40%

Concern over damage to Japan's core functions

Capital Earthquake

M7-class epicentral earthquake

Probability of an M7-class earthquake occurring in the south Kanto region within 30 years from now: Around 70%

M8-class trench-type earthquake - Taisho-type Kanto earthquake

Probability of a Taisho-type Kanto earthquake occurring within 30 years from now: Around 0% to 2%

Trench-type Earthquake
Epicentral Earthquake

Plan for Specific Emergency Response Activities in the event of a Nankai Trough Earthquake



Cabinet
Office

- Based on the “Nankai Trough Earthquake Disaster Prevention Measures Basic Plan” prescribed in Article 4 of the Nankai Trough Earthquake Prevention Measures Promotion Special Measures Act (Act 92 of 2002), make a **specific plan for emergency measures to respond** in the event of a Nankai Trough earthquake
- Formulate based on the assumption of the largest scientifically possible scale of tsunami and earthquake (major Nankai Trough earthquake). Examine making plans flexible so that **they can be adapted in the case of smaller scale damage**.

Nankai Trough Earthquake Disaster Prevention Measures Basic Plan (Extracts Specific related plan) (Decided by the Central Disaster Response Council in March 28, 2014)

Chapter 4 Basic policies regarding the implementation of emergency response measures in the event of a Nankai Trough earthquake

- When the Nankai Trough Earthquake occurs, it is important that the relevant disaster prevention organizations such as the national and local governments minimize damage more than anything by starting to mobilize immediately and smoothly, and quickly implement emergency response activities.
- For this reason, the national government should assume the Nankai Trough earthquake and prepare a plan to determine specifically the scale of the units in charge of disaster emergency control activities in order to deal with this, their emergency transport routes, their disaster prevention facilities, etc. (hereinafter referred to as the “specific plan”) and based on this, national and local governments, etc. are to implement integrated and clear-cut disaster emergency measures. This specific plan shall be flexible and applicable even when the actual disaster is different from the damage assumed in advance.

Section 4 Ensuring the transportation for rescue and first-aid measures, emergency transportation

- In order to enable the national government to start activities immediately after the disaster occurs, for each support unit, it shall define the matters relating to the activities of other units and the scale of dispatches based on damage estimates.
- In addition, the government shall set up emergency transportation routes which aim to rapidly deploy the units to engage in rescue and first-aid activities, etc. from other parts of the nation to the affected areas and stipulate them in a specific plan as well as stipulate a specific action plan related to the comprehensive clearing of roads, ports, sea routes, airports, etc. in order to ensure emergency transportation routes and emergency drainage.

Section 6 Medical services for an enormous number of victims, etc.

- In order to enable the national government to start activities immediately after the occurrence of the disaster, based on damage estimates, it shall stipulate a plan related to the medical services at the time of an emergency in a specific plan.

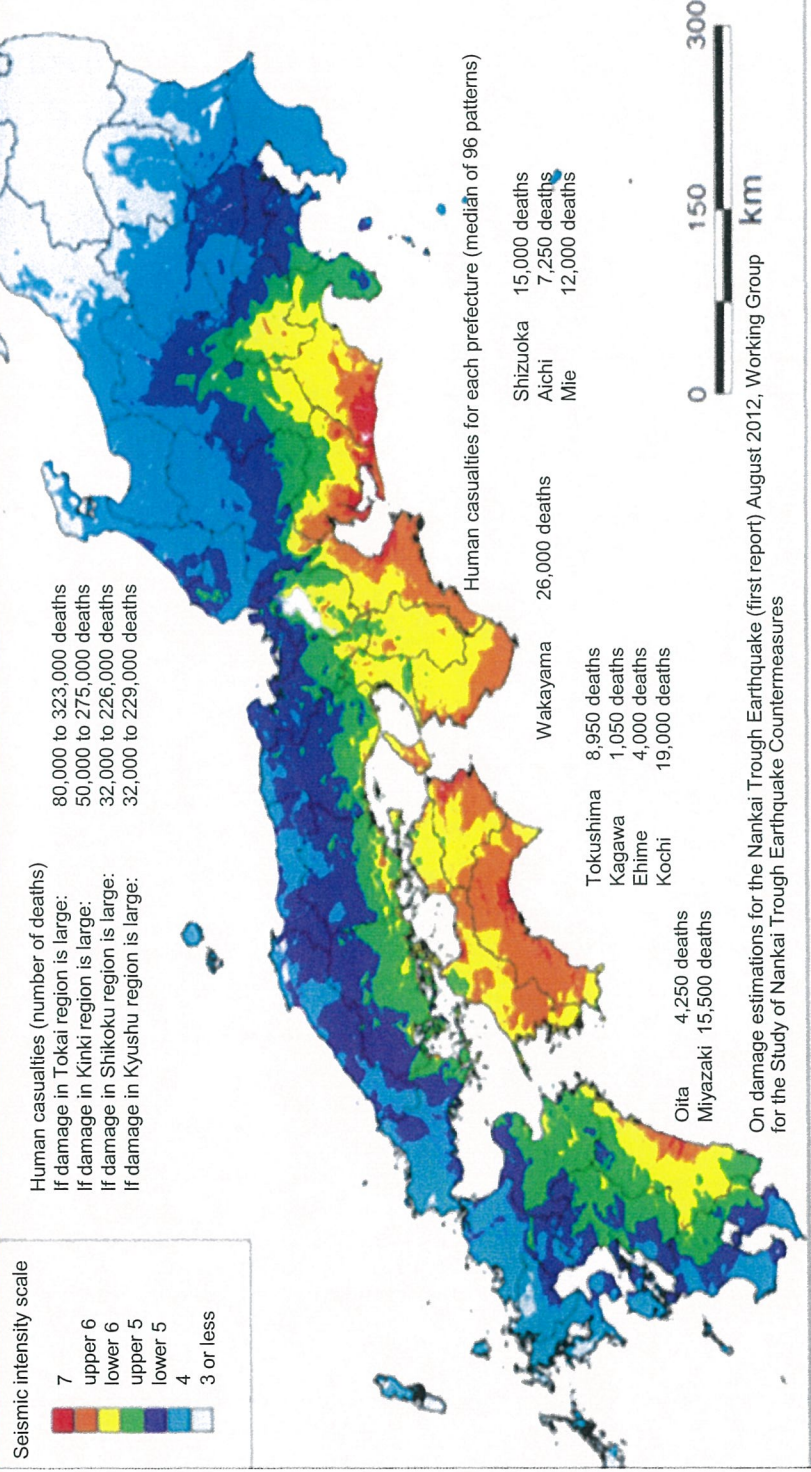
Section 7 Response to an absolute lack of goods

- In order to enable the government to procure and supply goods immediately after the occurrence of disaster, it shall establish a system related to the procurement and supply of rescue goods by national and local governments and clarify rules as well as stipulating supply entities, the amount of supplies, wide area goods supply bases, etc. in a specific plan about the goods such as drinking water, food, daily necessities etc., based on damage estimates.

Objectives of specific plans

- (1) After a disaster has occurred, each disaster prevention related organizations such as national and local governments, etc. **immediately start the disaster emergency response measures activities based on the specific plan without waiting to grasp the full status of damage and implement emergency response measures and activities smoothly and quickly.**
- (2) **Commit the human and material resources held by Japan selectively and quickly to those areas where damage is expected to be particularly serious.**

Nankai Trough Earthquake according to specific plan estimates (seismic intensity distribution, damage estimation)





Outline Plan for Specific Emergency Response Activities in the event of a Nankai Trough Earthquake

Rescue, first aid, firefighting, etc.

- ◎ Dispatch of wide area support units of the 37 prefectures other than the selected prefectures to receive support (maximum numbers)
 - Police: 16,000
 - Fire fighters: 17,000
 - Self-Defense Forces: 110,000, etc.
- ◎ Aircraft 620, ships 470

Medical treatment

- ◎ Dispatch request to the DMAT (registered number of teams: 1,323 teams), gathering land routes and fly routes, logistics support, giving missions
- ◎ Continuation of and recovery assistance for affected medical institutions (human resources, goods and fuel supply, etc.)
- ◎ Wide area medical transport, transport of critically ill patients by regional medical transport

Goods

- ◎ Procure relief supplies needed for 4 to 7 days after the occurrence of the disaster, transport to the bases of the affected prefectures
 - Water: emergency water supply 460,000 m³
 - Food: 72 million meals
 - Blankets: 6 million
 - Diapers: 4.8 million
 - Portable toilets: 54 million times, etc.

Fuel

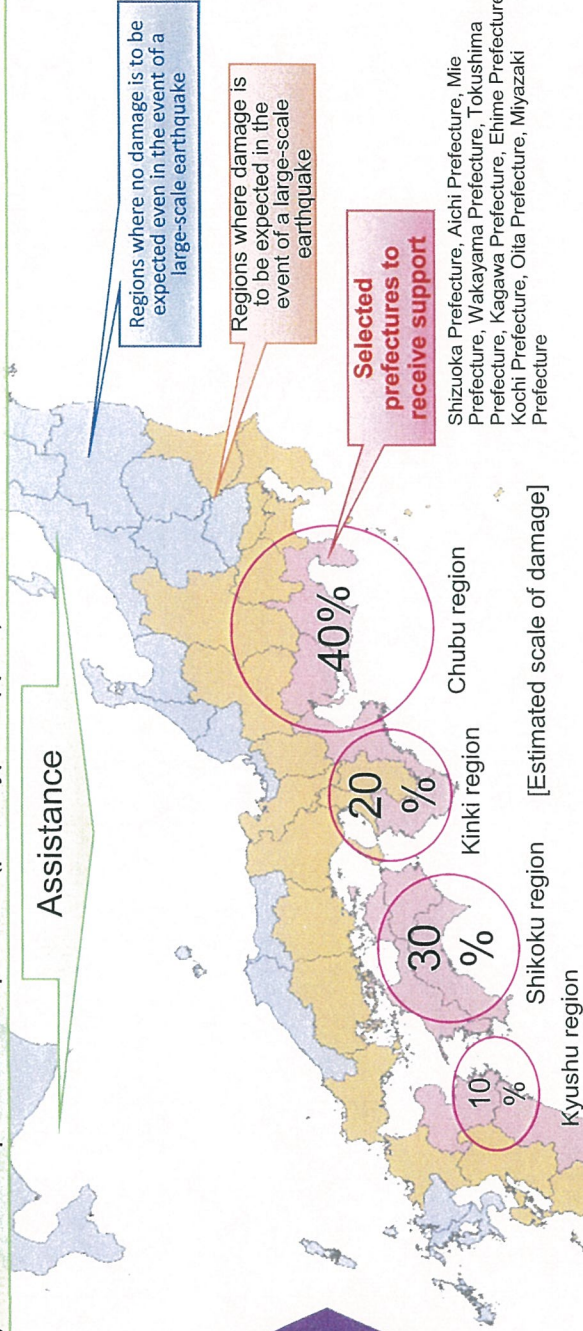
- ◎ Secure a supply system that goes beyond the group companies of oil industry
- ◎ Selected continued supply to the core SS, etc. on the emergency transport routes
- ◎ Priority supply based on the requests made to important facilities such as hospitals, etc.

The national government will start acting immediately without waiting for a full grasp of damages and requests from affected areas through adjustments made by the crisis response headquarters (push-type support).

Emergency transportation routes, disaster prevention bases

- ◎ Set up "Emergency Transportation Routes" for personnel and goods and secure early passage at the time the disaster occurs
- ◎ Set up "Disaster Prevention Bases" for each activity by field and secure them as soon as the disaster occurs

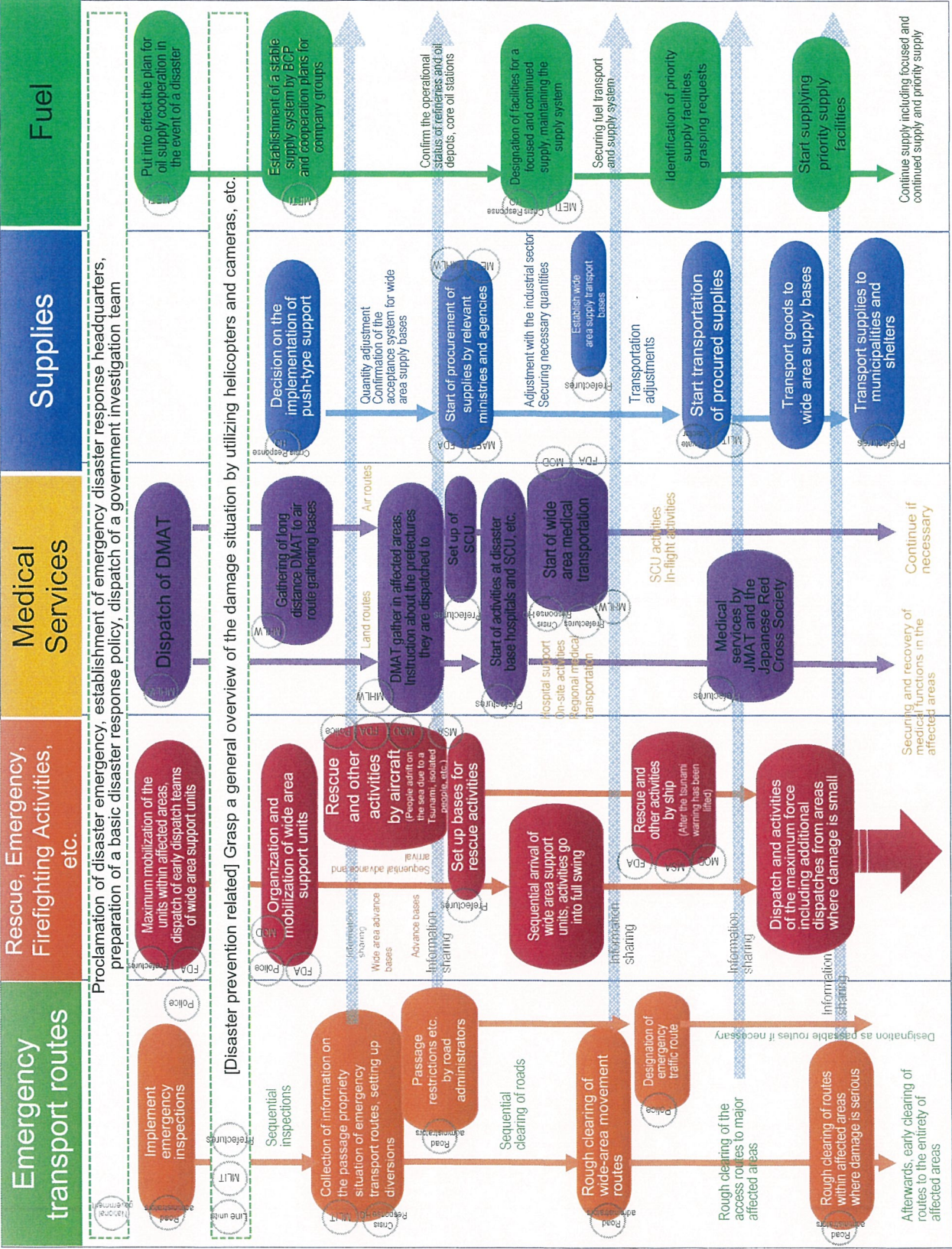
Assistance



Points of the specific plan

- (1) Being aware of the importance of the first 72 hours when saving a human life, set a time line and target actions in each of the fields of emergency transport routes, rescue, medical services, goods, fuel in various fields (Example: Wide area movement routes are secured within 24 hours, wide area support units arrive one after the other, etc.)
- (2) Dispatch of wide area support units and nationwide support DMAT mainly to those areas where the damage is the most serious (selected prefectures to receive support)

Expected timeline for each activity after the occurrence of the Nankai Trough Earthquake (image)



Expected time depending on the time the disaster occurs (* Note: Might change)

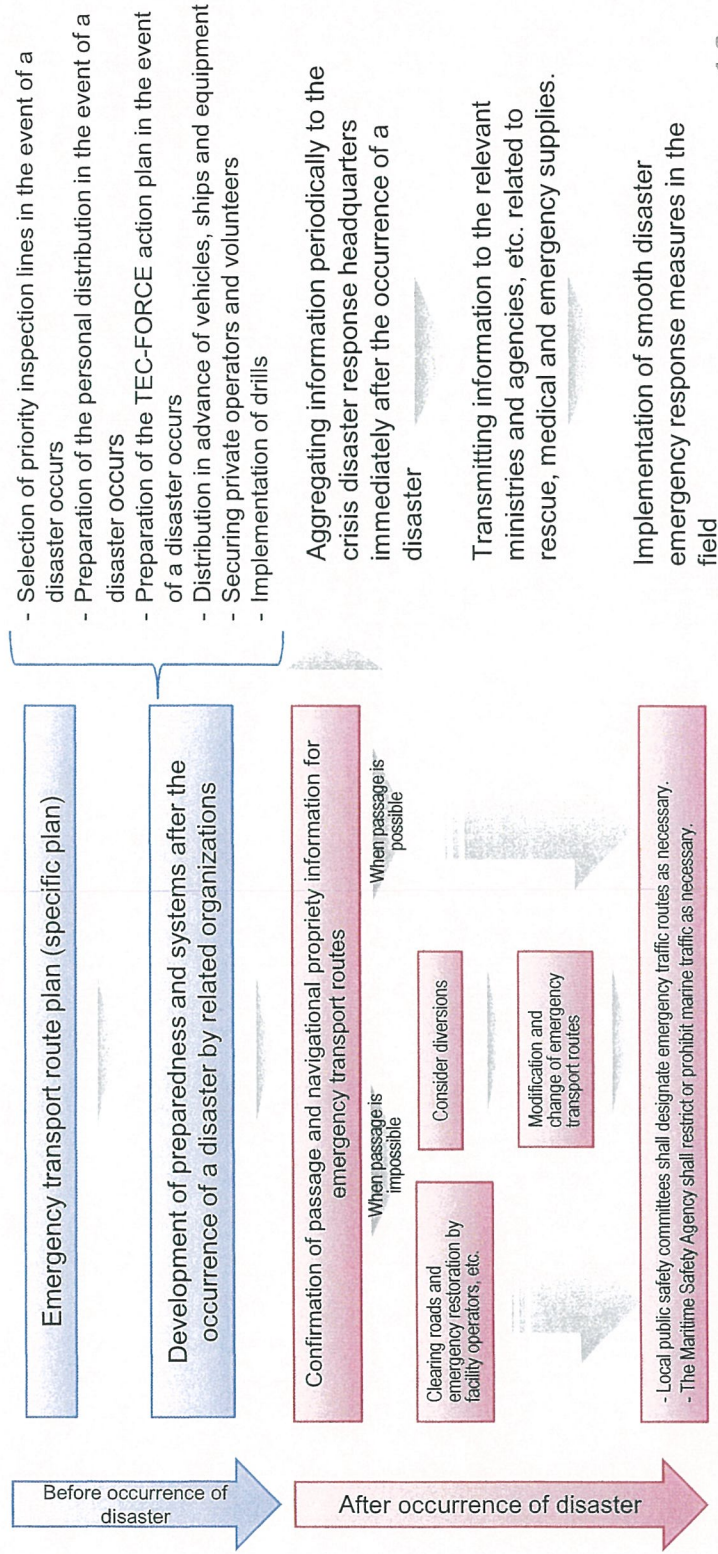
The above timeline was created as a case study for the activities of disaster prevention related organizations and it is necessary to note that there will be differences depending on the actual disaster situation.



Purpose and outline

- The emergency transport route plan shall designate roads with the aim of securing passage in advance so that the transport of personnel, supplies and fuel can be conducted rapidly and smoothly, in view of the fact that securing access to reach the areas where damage is extremely serious is the basis of all disaster emergency response measures and activities.
- Thus, in order to secure the passage of emergency transport routes as a top priority after a disaster has occurred, operations such as the sharing of traffic propriety information, road clearing and emergency restoration if necessary as well as traffic regulation (designation of emergency traffic routes, etc.) by the prefectural police have to be implemented in an integrated and efficient manner.

[Flow of the emergency transport route plan and responses after the occurrence of a disaster]



Outline of the plan regarding rescue and firefighting activities, etc. in the event of a Nankai Trough Earthquake

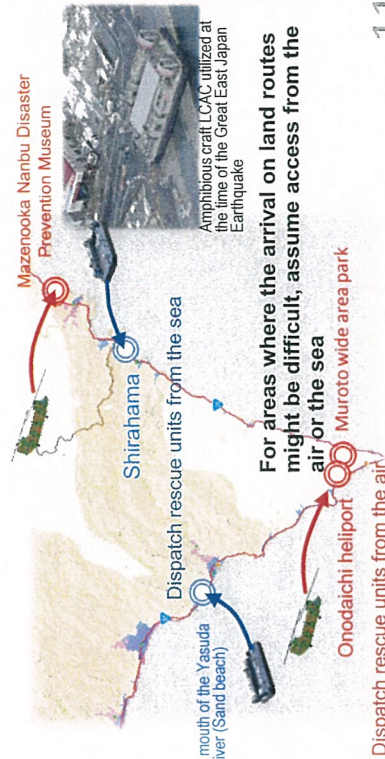
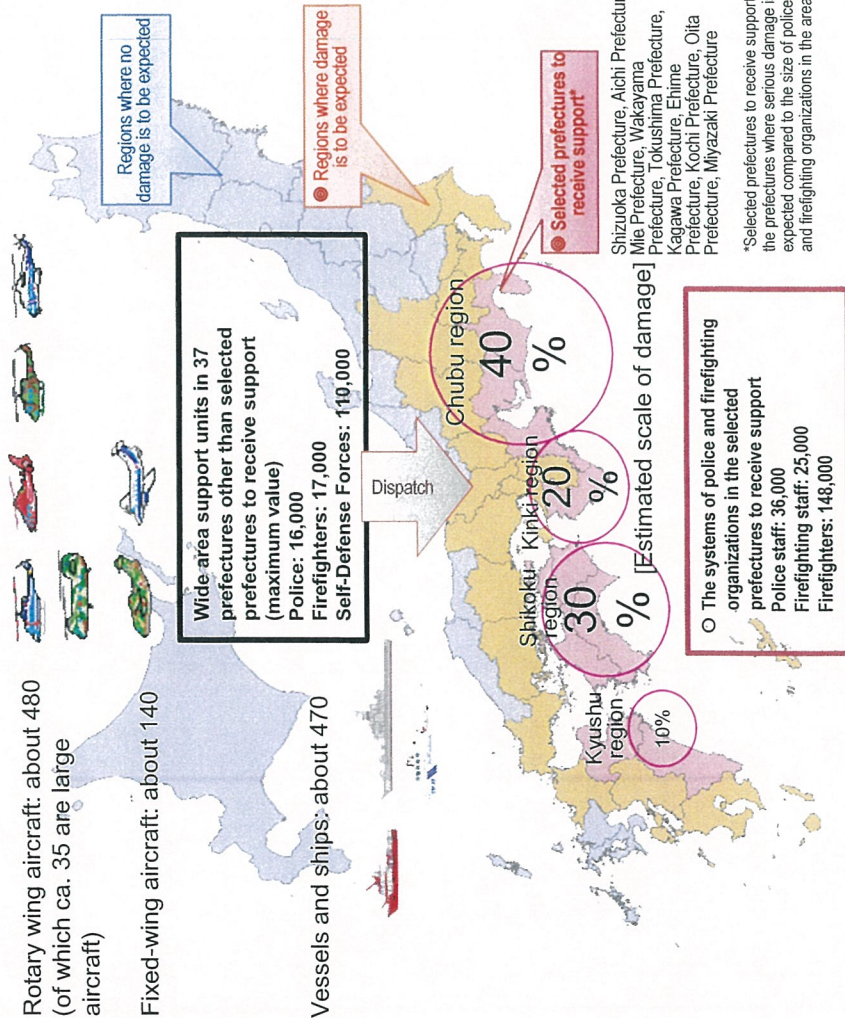


Purpose and outline

For the extensive damage caused by the Nankai Trough Earthquake, the dispatch policies and specific procedures, etc. in the initial phase shall be specified, in order to mobilize to the maximum police and fire fighters in the affected prefectures immediately after the disaster occurs as well as to dispatch maximum forces of police disaster relief operation units, emergency firefighting support units and disaster dispatch units of the Self Defense Forces (hereinafter referred to as "wide area support units") from around the nation to areas with extremely serious damage as fast as possible and in a precise manner.

[Main points of the dispatch, advance and action procedures of wide area support units]

- Based on damage estimations and information collection, adjust the dispatch destinations and scale depending on scale of damage in each area
- Advance rapidly to wide area advance bases (primary advance goal), advance bases (advance goal into selected prefecture to receive support)
 - *From Hokkaido and Okinawa Prefecture move quickly to the main island using private ferries in sections assumed in advance
- Rescue and firefighting activities in the affected areas
 - Assuming traffic disruptions on land routes, clarify in advance heliports (air routes), harbors and beaches (sea routes) in order to be able to conduct rescue operations from the air and the sea
 - Clarify smooth adjustment mechanisms between units (action coordination meetings at headquarter level, joint coordination centers, etc. in the field)

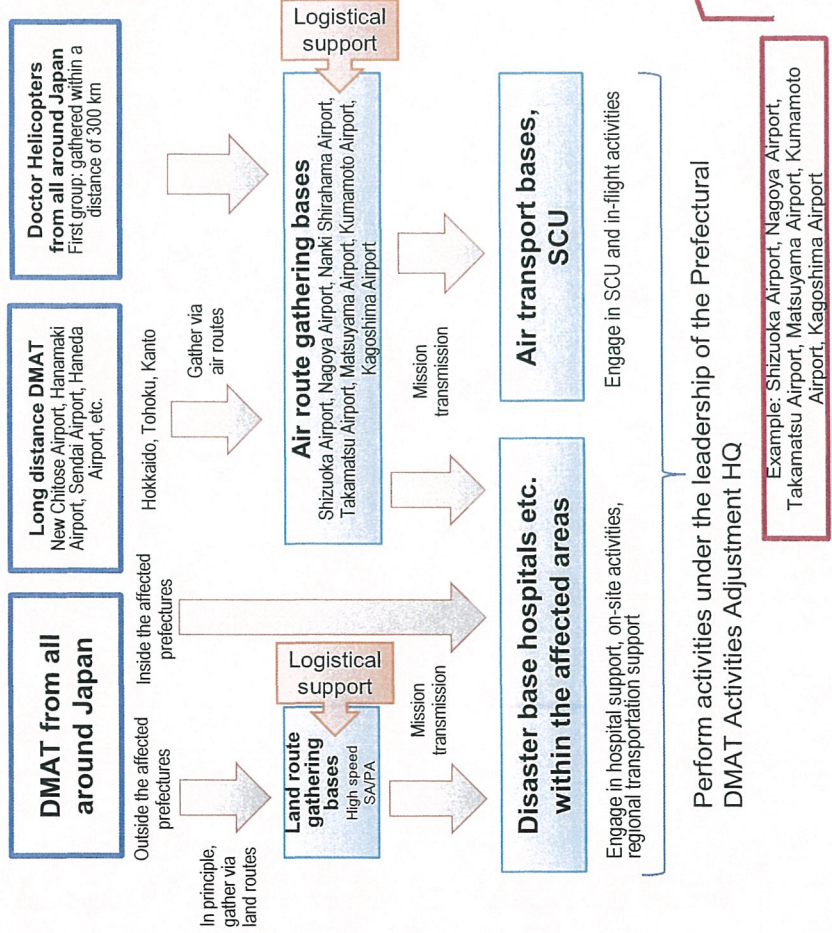


Outline of the plan regarding medical services in the event of a Nankai Trough Earthquake

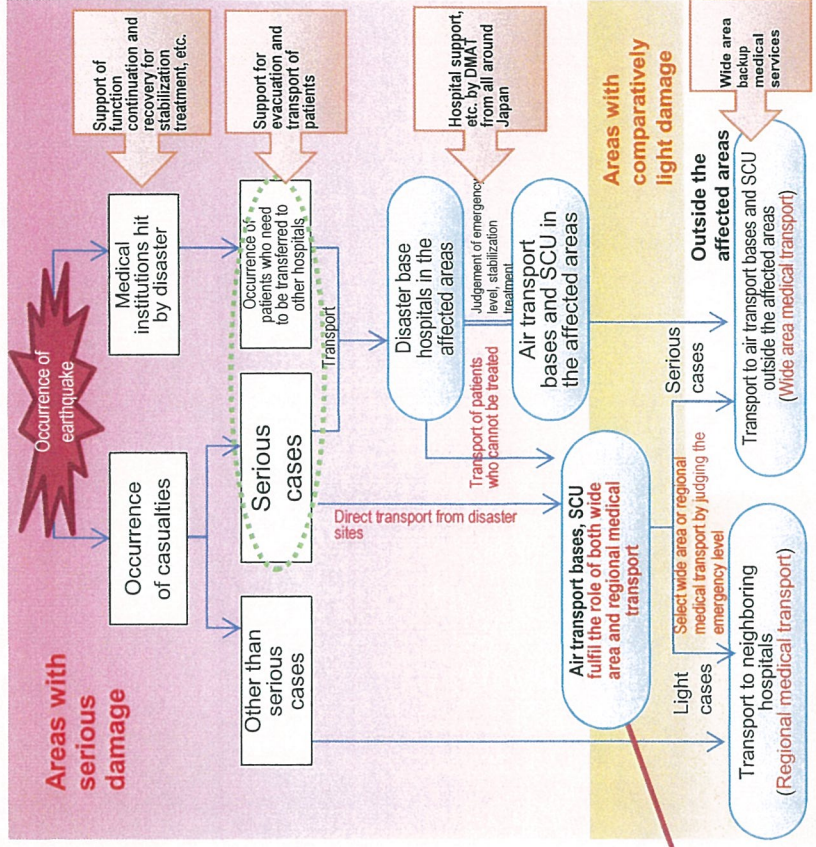
Purpose and Outline

- In the event of the Nankai Trough Earthquake, medical needs will rapidly increase and **medical resources in the affected areas will not be able to cope on their own**, due to the occurrence of casualties by building collapses, etc. and of **patients who need to be transferred to different hospitals from medical institutions hit by the disaster.**
- For this reason, **DMAT, etc. will be gathered rapidly from all over the country, a system will be established in which and minimum responses such as stabilization treatment in the affected areas are made possible and a system in which serious cases that cannot be treated in the affected areas are transported outside the affected areas for treatment will be built at an early stage.**

[Procedures related to the gathering of DMAT]



[Flow of medical transports for serious cases, etc.]



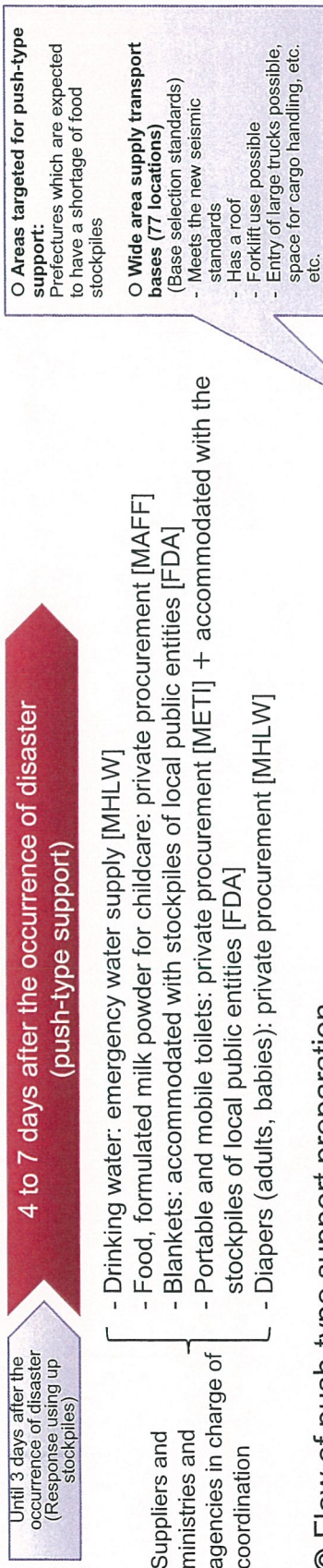


Outline of the plan regarding supplies procurement in the event of a Nankai Trough Earthquake

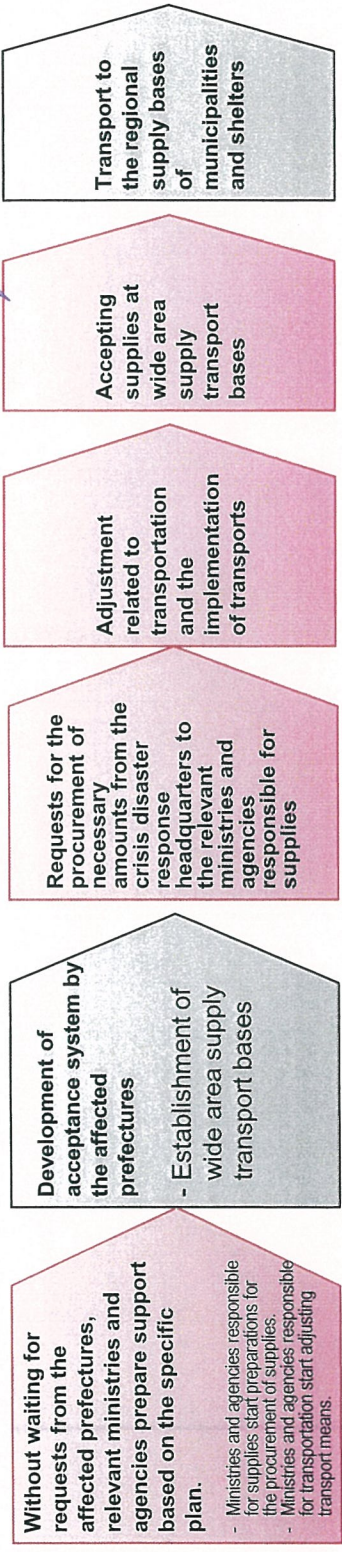
Purpose and outline

- In the event of a Nankai Trough Earthquake, **supplies that are stockpiled** in the affected local governments and households **will run out in a few days**, and because the affected local public bodies require time to grasp precise information while private supply abilities decrease, **it is difficult for local public bodies to rapidly procure the necessary amount of goods on their own.**
- For this reason, the government shall procure the supplies which are expected to be essential and **transport them immediately to the affected areas as push-type support** (switch to the pull-type (request-response-type) as early as possible) **without waiting for specific requests** from the affected prefectures. (Switch to pull-type support (request-response-type) as early as possible)

◎ The idea of procurement



◎ Flow of push-type support preparation

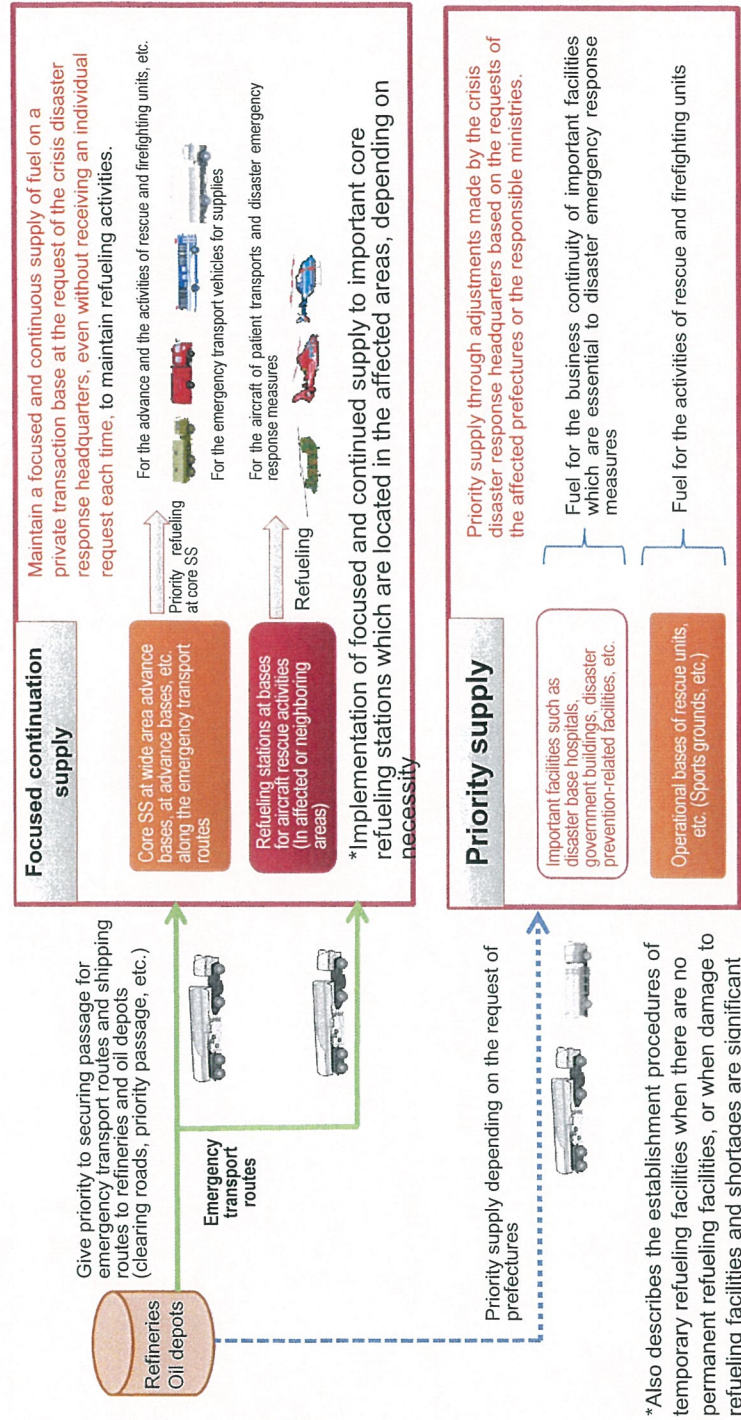


Purpose and outline

- It is absolutely necessary to secure and rapidly and smoothly supply the fuel needed for disaster emergency response measures and activities, even if **many of the refineries and oil depots, etc.** of the Pacific Ocean coastal areas **are affected** by the Nankai Trough Earthquake.
- For this reason, **taking as the basis the company group BCP of each of the company group supply networks** in the oil industry, establish a supply system which conducts **mutual cooperation beyond company groups based on the “oil supply cooperation plan in the event of a disaster”** stipulated in the petroleum stockpiling law.
- Secure the fuel transportation network promptly by **priority clearing of access roads and shipping routes to refineries and oil depots** planned to be turned into **emergency transport routes** and realize 1) **focused and continued supply** to advance bases and bases for aircraft rescue activities, etc. 2) **smooth and priority supply** to important facilities and bases for rescue activities, etc. through adjustments made by the crisis disaster response headquarters.

◎Taking the company group BCP of each company group supply network in the oil industry as basis, establish a fuel supply system reaching beyond group companies

◎After setting up the crisis disaster response headquarters, prompt implementation of the recommendations of the oil supply cooperation plan in the event of a disaster by the Minister of Economy, Trade and Industry





Outline of prevention disaster bases in the event of a Nankai Trough Earthquake

Classification of disaster prevention bases

- **Wide area advance bases:** Bases which serve as temporary goals when wide area support units move in direction of the affected areas immediately after a disaster occurs and are established in cooperation with facility administrators.
- **Advance bases:** Bases which serve as goals when wide area support units move towards prefectures receiving support and are established in cooperation with facility administrators.
- **Bases for rescue activities:** Bases which are assumed by prefectures and municipalities in advance as bases which conduct the command of units, camps, equipment collection, refueling, etc. and are secured as soon as possible after a disaster occurs.
- **Wide area supply transport bases:** Bases established by prefectures which send the supplies the national government is procuring by making adjustments and the prefecture accept towards transport bases in the affected areas and shelters established by municipalities.
- **Air transport bases:** Bases where it is possible for large rotating wing aircraft or fixed-wing aircraft which conduct wide area medical transports to take off and land and where it is possible to establish SCU.
- **Marine transport bases:** Ports assumed for the transport of personnel, supplies, fuel, equipment, etc. which have high earthquake resistance and functionality.

Of the above, clarification of the major bases among those which possess all the functions of rescue, medical care and supplies as "large-scale wide area disaster prevention bases"

