

Exploring Tokyo Bay

Present problems and future prospects of Tokyo Bay

4. Strengthening disaster management functions in the Tokyo Metropolitan area

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The Tokyo metropolitan area that encompasses Tokyo Bay is not only the most heavily concentrated urban area in the world but also the area most likely to suffer the greatest damage from a disaster. Last year, the national government released an estimate of the damage that could be caused a strong local earthquake in the Tokyo metropolitan area. A sense of crisis over the predicted disaster is thought to be growing among the citizens, leading to efforts to improve and consolidate the area's large-scale disaster response systems. Projects now under way include the construction of core wide-area disaster management bases in Ariake No Oka Area in Koto Ward and Higashi Ogishima Area in Kawasaki City, both which are waterfront areas. Begun in June 2001, these were the first urban renaissance projects to be selected by the Urban Renaissance Headquarters. These projects have the following goals.

- (1) Construct core wide-area disaster management bases in the waterfront areas along Tokyo Bay
- (2) Provide a setting for discussions between national and local government authorities and start compiling plans for the projects
- (3) Study the effective layout of the wide-area disaster management bases and consider the possibility of constructing similar bases in the Osaka metropolitan area

The term "core wide-area disaster management base" refers to disaster management bases that are designed to handle wide-area or devastating damage from disasters that cannot be managed by prefectural or city government alone but

can be addressed only through cooperation between the central and local governments. A council consisting of national government authorities and representatives from the metropolis of Tokyo, four prefectures, and four government ordinance cities in the Tokyo metropolitan area, was established in July 2001 to study the feasibility of these projects in the Tokyo metropolitan area.

What is a disaster management base? The council saw it as a wide-ranging concept that, in its broad sense, include an evacuation zone, evacuation center, stockpiling base, relief goods collection location, debris yard, emergency/restoration operation center, emergency headquarters facility, and a "spare" facility. Elementary and junior high schools that serve as evacuation centers and disaster management bases in the community are examples of disaster management bases in the broad sense. In the narrow sense, it is an emergency headquarters facility and emergency/restoration operation center, or in other words, a headquarters from which fire brigades, police officers, and Self-Defense Forces can command emergency/restoration operations. The core wide-area disaster management bases in the Urban Renaissance Project are disaster management bases in the narrow sense, i.e., facilities for providing emergency/restoration operations during wide-area disasters that cannot be managed by prefectural or city government alone but only through cooperation between the central and local governments.

After a few discussions, the council decided to construct bases in two places: Ariake No Oka Area

and Higashi Ogishima Area, both of which are in the waterfront areas of Tokyo Bay.

In Ariake No Oka Area, a heliport and base camps for support teams, including Self-Defense Forces, have been constructed along with field headquarters facilities for the national and local government authorities. Here, administrative agencies gather information and direct regional operations. The operation room is equipped with large-screen monitors, terminal devices, and communication equipment. The facilities include a meeting room, a napping room, and rooms for staff on standby.

Higashi Ogishima Area functions as a transshipment station for relief supplies, including those from abroad, as well as a primary assembly point and base camp for support teams. A large open area provides space for transportation activities at the station. The Area also contains a facility for controlling physical distribution operations as part of the functions of the joint field headquarters.

The facilities in both areas, including the headquarters buildings, serve as disaster management facilities. The open spaces in the Ariake No Oka Area are part of a park while those in the Higashi Ogishima Area are part of the port and harbor. Both projects are now under way.

Inland disaster management bases are also necessary, but these are to be preceded by the bases in the waterfront areas. The densely inhabited area along the coast of Tokyo Bay spreads out in a fan-like form, and the Council ranked higher the waterfront areas that are located at the pivot of the fan. Compared to the inland areas, the waterfront areas, which have wholesale markets, warehouses, and other facilities for stockpiling and distributing supplies, provide more sophisticated transportation infrastructures and higher potential as bases for relief activities. Land is also easier to procure in the waterfront areas than in the inland areas. For these reasons, the waterfront areas

were selected as sites for the first core wide-area disaster management bases.

The bases currently under construction are “points” on a map but disasters affect wide areas. Therefore, it is necessary to strength the capacity to manage disasters by cooperating with other, conventional facilities in the waterfront areas, and develop a disaster management system that connects the points to lines in the waterfront areas, which then connect to inland areas. The bases in the waterfront area are expected to take a leading role in the construction of the disaster management system.

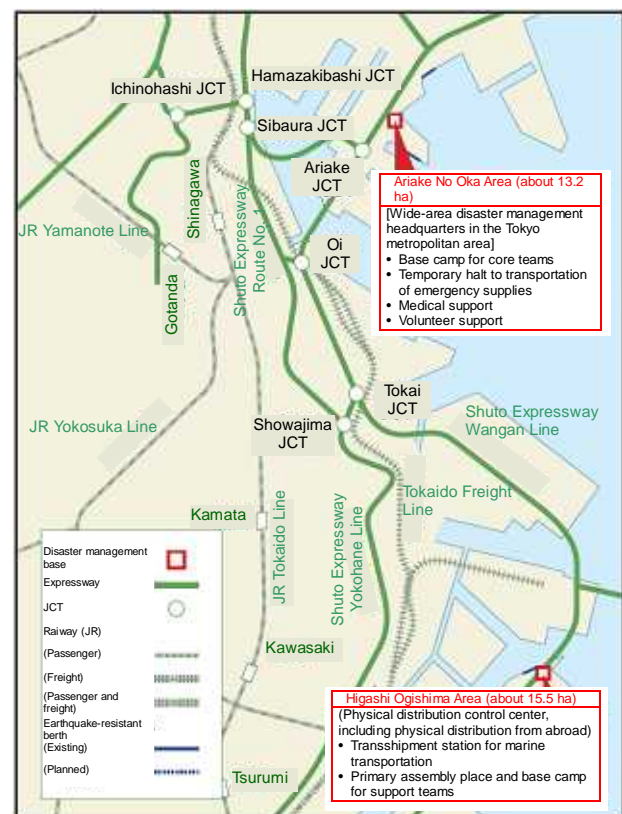
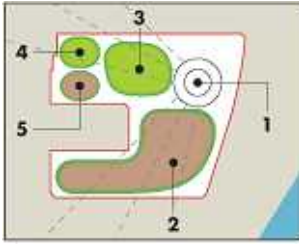
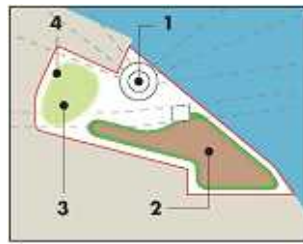


Fig. 1 Core wide-area disaster management bases in the waterfront areas along Tokyo Bay



1. Heliport (about 2.6 ha)
 - Transportation of people and relief supplies, and activities of support teams
2. Wide-area support teams and base camp (about 6.6 ha)
 - Activities of wide-area support teams and volunteers, and control point
3. Base camp for core teams (about 2.5 ha)
 - Control point for wide-area support teams
4. Headquarters building (Lot: about 0.5 ha) (Building: about 10,000 m²)
 - Disaster management facilities
Construction of joint field headquarters facilities, including operation room, headquarters meeting room, and communications equipment room
 - Park facilities
Construction of facilities for exhibitions and on-site disaster training at normal times.
5. Disaster medical support (about 1.0 ha)
 - Sharing of information between rescue operations and medical services
 - Provision of supplies, hardware, and equipment to triage incoming patients

Fig. 2 Construction of core wide-area disaster management base in Ariake No Oka Area



1. Heliport (about 2.9 ha)
 - Transportation of people and relief supplies, and activities of support teams
2. Transshipment station for transportation of relief supplies (about 9.6 ha)
 - Collecting, sorting, and distributing relief supplies
 - Base for river transportation
3. Base camp for wide-area support teams (about 3.0 ha)
 - Yard for tents and the activities of wide-area support teams
4. Facilities (Lot: about 0.3 ha) (Building: about 400 m²)
 - Construction of facilities required to distribute supplies in Higashi Ogishima Area, including operation room, headquarters meeting room, and communications equipment room

Fig. 3 Construction of core wide-area disaster management base in Higashi Ogishima Area