

Creating a guide plan regarding considerations of securing urban disaster -preparedness functions for tsunami disaster mitigation city planning

KIUCHI Nozomu(Ph.D (Engineering)), Head, Urban Planning Division

TAKEYA Shuichi(Ph.D (Engineering)) ,Head, Urban Disaster Mitigation Division

KATSUMATA Wataru(Ph.D (Engineering)), Head, Urban Development Division

Urban Planning Department

(Keywords) tsunami disaster prevention city planning, disaster prevention base, Nankai Trough Quake, Great East Japan Earthquake

1. Foreword

Up to now, the focus of initiatives for disaster prevention city planning was the disaster mitigation of direct damages (building collapses and urban area fires etc.) caused by accident occurrences associated with major earthquakes. However with the Great East Japan Earthquake, due to serious damages caused by the large scale/extensive tsunami flooding on the urban disaster preparedness base facilities, which act as activity bases in times of disasters in the urban areas of the coast cities, difficulties arose for disaster emergency efforts in the disaster-struck city, as well as in the aid efforts of various agencies including external aid. Through this, however, various issues from the location and networks of the urban disaster preparedness facilities, to the individual measures taken at each facility, became clear.

In order to handle these issues, the Urban Planning Department has taken initiatives to secure the disaster preparedness functions for major tsunamis through disaster mitigation city planning in the "Research related with structured disaster prevention support technology of coastal cities" (fy 2012 to 2014). We inspected the actual conditions of the loss and recovery of the disaster preparedness base functions in the disaster-hit Tohoku cities, and implemented case studies for securing these urban disaster preparedness functions based on the creation of a disaster response flow chart/activity development chart of the Tokai - Nankai Trough coastal cities that will assumedly receive the the largest scale of tsunami damages, according to the Act on Regional

Development in Tsunami Disaster. A guide plan for the examination was compiled based on the research results.

2. Regarding the creation of a guide plan

The guide plan is an examination procedure manual for the securing of urban disaster preparedness functions with regards to tsunami disaster mitigation city planning, and indicates the inspection method of the improvement plan for urban disaster preparedness facilities, as well as the direction of city planning of coastal cities, and compiles specific case studies, and technical references required for the inspections,

Its main purpose is so that the city planning bureaus of municipalities and or other bureaus with jurisdiction related to city planning/policies can reflect the examination procedures in the guide in their disaster mitigation city planning, tsunami disaster mitigation community plan and the national enhancement regional planning efforts. Even with regards to the disaster mitigation/crisis control bureau, the effects of the enhancement of the facilities' disaster preparedness function at urban disaster preparedness facilities in initiatives like the regional plan for disaster prevention, BCP, the community plan for disaster prevention, the tsunami evacuation plan, as well as designating hazard areas can be investigated. As well, the document regarding examinations can also be used as a springboard document for discussions on disaster mitigation measures by various related agencies examining scenarios of disaster mitigation drills and providing wide areas of support, to the facility managers themselves.

3. Releasing the guide

Regarding the created guide plan, it is scheduled for release in 2015 following adjustments with other related departments.

(Reference)

NILIM 2014 report "Deprivation/Recovery of coastal cities' disaster-prevention facilities functions by the Great East Japan Earthquake tsunami and the construction of disaster-prevention cities' lodgment functions and creation of disaster-prevention cities"

<http://www.nilim.go.jp/english/annual/annual2014/4.pdf>

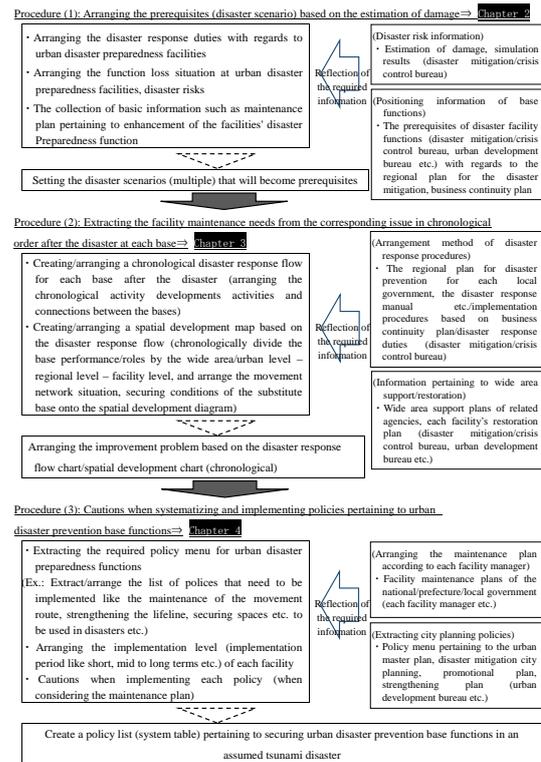


Figure: Flow of the examination regarding the guide plan structure and securing of urban disaster prevention base functions