

災害時・平常時に機能する環境・防災情報エリアマネジメントの研究  
Area Management of Environment and Disaster Prevention Information  
in Disaster and Normal Time

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Summary

If the large-scale disaster occurs, an unspecified number of people to stay in the outdoor space of the city, by falling into information refugees, are assumed to place in further difficult situation. During disaster occurring, it could obtain wide-area information, the information supplied by large media partly, but it is difficult for people to stay in the urban outdoor space to obtain information of surrounding or district scale, information on the evacuation facilities or a temporary refuge at the time of an disaster. Especially it is difficult situation for people who are unable to return home, visitors from foreign countries, children and elderly people.

Especially come the city's as to visit the city were children and the elderly, for foreigners, a situation it is difficult to obtain such information, to these people, to provide effective information in the confusion situation at the time of disaster mechanisms are needed.

It is expected that information system which functions at normal condition and disaster situation. If the system would only be used disaster situation, it could not function appropriately, for users are not familiar with the system. The system has advantages if it would be used at normal situation for daily usages, it would function at emergency situation.

In this study, the environmental and disaster prevention information system for cities were developed and solve information problems, and the system demonstration were implemented in the target cities. A several survey were conducted on situation and development trend in local government of cities and area management organizations , and general public to obtain user's needs. Users and local government expressed that these information system are important and should be prepared. Environmental and disaster information of the district, the collection and collection of information during disaster situation are not well established. The results of this research project would contribute to development of the information system.

A mockup model of environmental and disaster information system was developed and it assumed the installed base in urban outdoor space. Several experiments were conducted in

Nishi-Shinjyuku as a center of large city and in Utsunomiya city center shopping street and a train station as the local suburbs was extracted the issues of the mechanism of the function and operation of the environmental disaster information system.

In preparation for installation in the actual city space, it was conducted to develop information contents and the environmental disaster prevention information system in cooperation with Nakano ward and other stakeholders around Nakano Station area. taking into account the characteristics of the Nakano station surrounding area, it is determined that the essential easy-to-understand mechanism for foreigners, children and the elderly, a digital map to display that incorporates a multilingual and pictogram display of the mechanism of the information content, and smartphone application are integrated.

A social experiment was conducted in Nakano Four Seasons Park, it was carried out verification of the function. " Environment Disaster Information System for Nakano Station neighborhood Study Group" was established in corporation with Nakano ward and our research group stakeholders to carry out towards a society implementation. Activities of the Study Group, has been positioned as one of the proposals of the Nakano ward, in accordance with the National Strategy Special Zone.