

6. Development of Total Management System Including Transport Control - Integration of Environmental Risk and Vehicle Arrival Management Function Using ICT -

Yoshikazu Otsuka, Masao Konishi, Katsuhide Morimoto, Ryouzuke Imai

Several disasters have been occurred frequently, in recent years. A speedy restoration from a disaster, therefore, has become a societal demand, and it is in many cases important to dispose of disaster debris properly. The 2011 off the Pacific coast of Tohoku Earthquake generated a huge volume of debris, and the treatment and disposal of the debris, together with environmental restoration involving the decontamination of large areas of land affected by the radioactive materials released from the nuclear reactor as a result of the earthquake and tsunami disaster, have been underway as part of a national recovery project. This project requires proper management of radiation exposure risk to construction workers and environmental risk caused by the transportation of removed soil on public roads, and versatility to adapt promptly to changes in plans, accurate decision making. These requirements made it necessary to develop a total management system capable of (1) integrating transportation, environmental risk and business operation management, versatility features for prompt adaptation to changes in plans, and optimal transportation operation management and (2) assisting or substituting for on-site management reflecting the latest information in complex management processes. This paper reports on the functions of the total management system developed by incorporating transportation management features into a disaster debris disposal and decontamination work management system developed earlier.

Key words: disaster debris, designated waste, decontamination work, transportation management system, cesium