Safety and Security

Technical Emergency Control FORCE

TEC-FORCE （ Technical Emergency Control Force）

It is a group of experts established in the Ministry of Land, Infrastructure, Transport and Tourism, and each Regional Development Bureau, etc. in order to perform smooth and prompt implementation of technical support for disaster emergency measures such as; prompt grasp of the damage situation carried out by afflicted local government, prevention of occurrence and spread of damage, and early restoration of afflicted areas when a large-scale natural disaster occurs or there is a risk of an occurrence.

Disaster situation investigation

Information and communication support

Emergency measures

Assembly and disassembly

Disassembly / assembly type backhoe

Surveys of damaged roads

Surveys of damage situations using a drone

(Typhoon No. 10 Torrential Rain in Tohoku in September 2016)

Emergency construction assisted by lighting car

Investigation of road damage area

(April, 2016 Kumamoto Earthquake)

Major activities

◆March,2011	Great East Japan Earthquake 2,882 people (18,115 person-days in total) from all over the country
◆August, 2014	Landslide occurred in Hiroshima prefecture 439 people from all over the country (2,431 person-days in total)
◆August, 2014	Torrential rain disaster occurred in Fukuchiyama city, etc. in Kyoto Prefecture 158 people from all over the country (378 person-days in total)
◆September, 2015	Torrential rain in Kanto and Tohoku 826 people from all over the country (2,587 person-days in total)
◆April, 2016	Kumamoto Earthquake 2,110 people from all over the country (10,912 person-days in total)
◆September, 2016	Typhoon No. 10 Torrential Rain in Tohoku 938 people from all over the country (3,524 person-days in total)

Activity content

Dispatch of Information Contact Personnel (Liaison), etc. to Emergency Disaster Response Task Force (TEC-FORCE) and afflicted local government.

TEC-FORCE activities by the Kinki Regional Development Bureau in 2016

- Kumamoto Earthquake
  - For 30 days from April 15 to May 13, 16 groups comprising 128 members (792 person-days in total) were dispatched by the Kinki Regional Development Bureau.
  - Seven lighting cars, two satellite communications cars, two disaster headquarters cars and one dismantling-type backhoe capable of unmanned operation were dispatched.
- Typhoon No. 10 Torrential Rain in Tohoku
  - For 17 days from August 31 to September 16, six groups comprising 44 members (317 person-days in total) were dispatched by the Kinki Regional Development Bureau.

Support for afflicted municipalities

Signed "support at the time of disaster" between Regional Development Bureau and municipalities

An agreement is concluded for quick and smooth dispatch of TEC-FORCE, liaison, and machinery for disaster countermeasures in order to prevent damage expansion and secondary disasters, when a disaster occurred in the area of a local government (municipality) or there is a risk of a disaster.

Local Government Support Activities (Technical support by TEC-FORCE, Miyazu City, Kyoto Prefecture)

Agreement at the time of disaster with various organizations • Construction business continuity plan (construction business BCP)

Concluded a disaster agreement between the Regional Development Bureau and various organizations

In response to the occurrence or fear of disasters such as Earthquakes, tsunamis, wind and flood damage, an agreement is concluded in order to prepare system in advance, prompt and smooth emergency response immediately after the disaster, and implementation of emergency no-bid contract construction, etc. against occurrence or risk of etc.

Promotion of construction business continuity plan (construction BCP) at the time of disaster

For large-scale natural disasters, secondary disaster prevention, emergency response, early restoration and reconstruction of infrastructure are the most important tasks.
For this reason, construction companies, etc. need to take measures to mitigate their damage and to strengthen disaster response capabilities for quick returning to normal operations, and Kinki Regional Development Bureau, with expectation that such efforts will be promoted, implements a construction business continuity certification system in the event of a disaster.

What is Business Continuity Plan (BCP)?
When a company suffers damage due to a disaster or accident, it is expected to minimize the damage or avoid interruption of the important operations as well as to resume in the shortest possible period. This plan to pursue business continuity is called as "Business Continuity Plan (BCP)."

Current Certified Companies
This system is established from FY 2012 and certified 646 companies with business continuity capability at the time of disaster (as of March 24, 2017).

Effects of construction business continuity certification system

- Promotion of construction business continuity plan → Improvement of regional disaster prevention ability
- Disaster-resistant construction industry in the Kinki district → Improvement of corporate capabilities
- System for quick restoration and reconstruction at the time of disaster → Contribution to the community and society

System of certification — Construction company

Apply for accreditation by preparing the system (basic continuing power, community contribution) necessary for business continuity in the event of a disaster

Application / Certification

- Holding basic continuing power
- Contribution to the area at the time of disaster

2 years certification

Incentive on bidding

At the disaster of Kinki Regional Development Bureau Construction business continuity certification system

Crisis management and response for large-scale natural disasters such as the huge earthquake and tsunami of the Nankai Trough

Nankai Trough earthquake countermeasure plan

The Ministry of Land, Infrastructure Transport and Tourism has formulated the "Nankai Trough Earthquake Countermeasures Plan" and "Kinki District Regional Countermeasures Plan" on April 1, 2014 as a response to the occurrence of the Nankai Trough earthquake, and the ministry compiled measures to tackle with full efforts.

Various training in cooperation with other organizations

In cooperation with administrative organizations as well as disaster prevention organizations such as local governments and public institutions, in order to protect citizens' safety and security from large-scale natural disasters and crisis management events, various kinds of training are implemented.

Use daily training results

Implemented training of securing traffic routes for emergency vehicles jointly with police, etc.

◀ Training of removing unattended cars

Emergency drainage training by pumping cars by TEC-FORCE members

Pump car drainage training ▶

For actual disaster response

Disaster of typhoon No 18 in 2013

Grasped the disaster situation and provided support for emergency restoration works

Monitoring of disaster sites using satellite communication

Dispatch of lighting car to the emergency restoration site

Kanto Tohoku torrential rain in 2015

Large-scale drainage work in Jyoso City, Ibaraki prefecture

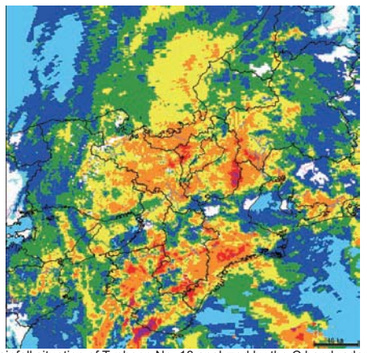
Drainage of flooded area by pump car ▶

Enhancing observation of localized torrential rain • Accelerating information transmission

Currently, water disasters due to localized torrential rain are increasing, as a countermeasure, high-performance compact radar, capable of high precision and high frequency observation, is developed, which shorten the time for observation data distribution to strengthen the crisis management responsiveness.
Prediction of localized torrential rain and consideration of early detection method will be conducted from the observation data.

High-performance compact radar rain gauge (Rokko)

High-performance compact radar location [Rokko • Taguchi • Washomiyama • Katsuragi]



"Rainfall situation of Typhoon No. 18 analyzed by the C band radar of the Ministry of Land, Infrastructure, Transport and Tourism" 3:00, September 16, 2013

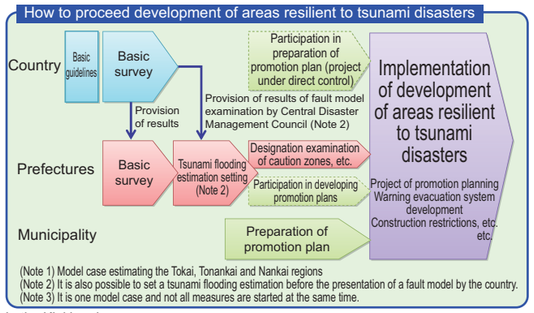
Promotion of development of areas resilient to tsunami disasters

Local governments are supported in order to prevent and reduce future tsunami disasters by implementing a “multiple protection” system that includes structural and non-structural measures for "Development of Areas Resilient to Tsunami Disasters."

Basic idea for the largest class tsunami

- It is important to take countermeasures based on the concept of "disaster reduction" focusing on minimizing damages.
- Thus, the damage caused by the tsunami shall be reduced as much as possible through structural measures such as coastal conservation facilities.
- For tsunamis exceeding the above, non-structural measures that focus on evacuation, such as the development of hazard maps, shall be emphasized.

How to proceed development of areas resilient to tsunami disasters



(Note 1) Model case estimating the Tokai, Tonankai and Nankai regions
(Note 2) It is also possible to set a tsunami flooding estimation before the presentation of a fault model by the country.
(Note 3) It is one model case and not all measures are started at the same time.

In the Kinki region,
- A promotion plan was prepared in March 2015 in Kushimoto Town, Wakayama Prefecture.
- Tsunami disaster caution zones were designated in Wakayama Prefecture in April 2016 and in Kyoto Prefecture in March 2017.

Image of development of areas resilient to tsunami disasters to protect the life