

# Dispatch of TEC-FORCE and other Experts to Disasters, and State of Technical Support Activities

## 1. Introduction

As shown by the example of the announcement by the Ministry of Land, Infrastructure, Transport and Tourism in January 2015 of "Effective Ways to Prevent or Mitigate Disaster Damage at the New Stage", we are already conscious of the localization, intensification, and increasing severity of the impacts of nature seen in recent years, and have been working harder than ever to promote efforts to integrate "structural" and "non-structural" measures to minimize disaster damage. As one effective method to achieve these goals, the Ministry of Land, Infrastructure, Transport and Tourism established TEC-FORCE (Technical Emergency Control FORCE)) in 2008, which has acted many times to prevent the occurrence or spread of damage or to carry out early restoration after a disaster.

## 2. Technical Support Activities of the NILIM

TEC-FORCE, which is based at the NILIM, acts as an Advanced Technology Guidance Team which, backed up by accumulated day-to-day research, deals primarily with phenomena or disaster damage that are difficult or complex to assess. Its major roles are, in addition to surveying damage conditions and evaluating the safety of facilities, providing advice based on its authoritative

judgments to prevent secondary disasters.

When sediment disasters struck Hiroshima City in August, 2014, a few hours after the early morning occurrence, TEC-FORCE began to travel to the site to conduct a survey on the same day. Later, its members gave technical advice to support decisions concerning whether or not it was possible for the Self-Defense Forces, police and fire-fighters to enter the disaster region to conduct rescue activities, and also responded proactively as experts to requests for advice from local residents and governments, and from regional development bureaus.

The NILIM responded by, in addition to the activities of TEC-FORCE in the disaster region, aggressively continuing activities similar to those undertaken by TEC-FORCE when requested to do so by local governments or regional development bureaus in the region. And without requests or instructions to do so, it also voluntarily sent personnel to survey phenomena that must be handled considering the design of structures and to conduct other activities to improve technical capabilities concerning the prevention of damage to public capital.

Table 1 Despatch of Experts in FY2014 (Dec. 2014)

Disaster	Day dispatched	Location dispatched	Positioning of the dispatch	Personnel dispatched
Torrential rainfall on June 7	June 12	Kanagawa Pref. Yokosuka City Highland 1-chome	Request by Kanagawa Pref.	Sabo Dept., Sabo Risk-Management Div. Senior Researcher Matsushita Kazuki Sabo Dept., Sabo Planning Div. Chief Official Kado Takeshi
Typhoon 8	July 10 to July 11	Nagano Pref., Nagiso-machi	Request by Chubu RDB	Sabo Dept., Sabo Planning Div. Head Kanbara Junichi
Typhoon 11 (Torrential rains of Aug. 2014)	Aug. 10 to Aug. 11	Nara Pref. Gojo City Totsukara Town, Akatani District Kurihira district	Request by Kinki RDB	Sabo Dept., Sabo Risk-Management Div. Head: Kunitomo Masaru Sabo Dept., Sabo Planning Div. Chief Official Hirohara Motohiko
Typhoon 12 (Torrential rains of Aug. 2014)	Aug. 8	Yamaguchi Pref., Iwakuni City, Shinminato and Tada Districts	Request from Yamaguchi Pref.	Sabo Dept., Sabo Planning Div. Senior Researcher Uchida Taro Chief Official Oochi Hisanori
Torrential rains of Aug. 2014	Aug. 20 to Aug. 22	Kyoto Pref. Fukuchiyama City Hyogo Pref. Tanba City	Voluntary survey	River Dept. Flood Disaster Prevention Div. Head Ito Hiroyuki Researcher Hosoda Satoshi
Continuous heavy rain from Aug. 16 (Torrential rains of Aug. 2014)	Aug. 20 to Sept. 8 Sept. 12 to Sept. 17	Hiroshima Pref. Hiroshima City, Asaminami Ward, Yagi Dist. And others	Request by Chugoku RDB TEC-FORCE	Sabo Dept. Head Watari Masaaki Research Coordinator for Sediment Disaster Prevention Nagai Yoshiki Sabo Dept., Sabo Planning Div. Head Kanbara Junichi Senior Researcher Uchida Taro Researcher Matsumoto Naoki Researcher Tanaka Yasutaka Chief Official Sakou Shunsuke Chief Official Uchida Takuji Sabo Dept., Sabo Risk-Management Div. Head: Kunitomo Masaru Senior Researcher Matsushita Kazuki

Disaster	Day dispatched	Location dispatched	Positioning of the dispatch	Personnel dispatched
				Researcher Kamiyama Joko River Dept., River Div. Head Hattori Atsushi
Continuous heavy rain from Aug. 16 (Torrential rains of Aug. 2014)	Sept. 16	Hiroshima Pref. Hiroshima City, Asaminami Ward, Yagi Dist.	Voluntary survey	Building Dept. Research Coordinator for Disaster Mitigation of Building Okuda Yasuo Building Dept., Standards and Accreditation System Div. Head Ando Koji
Heavy rainfall brought by low pressure on Sept. 11, 2014	Sept. 18 to Sept. 19	Hokkaido, Chitose City	Voluntary survey	Road Structures Dept., Pavement and Earthworks Div. Head Yabu Masayuki Researcher Enomoto Tadao Road Structures Dept., Foundation, Tunnel and Substructures Div. Senior Researcher Nishida Hideaki
Eruption of Mt. Ontake	Sept. 27 to Sept. 29	Nagano Pref., Kiso-gun, Kiso Town, Otaki Town	Emergency survey under the Sediment Disasters Prevention Act	Sabo Dept., Sabo Risk-Management Div. Head Kunitomo Masaru
	Oct. 2 to Oct. 3	Nagano Pref., Kiso-gun, Kiso Town, Otaki Town	Emergency survey under the Sediment Disasters Prevention Act	Sabo Dept. Head Watari Masaaki
	Oct. 5 to Oct. 7	Nagano Pref., Kiso-gun, Kiso Town, Otaki Town	Emergency survey under the Sediment Disasters Prevention Act	Sabo Dept., Sabo Risk-Management Div. Head: Kunitomo Masaru
	Oct. 13 to Oct. 15	Nagano Pref., Kiso-gun, Kiso Town, Otaki Town	Emergency survey under the Sediment Disasters Prevention Act	Sabo Dept. Research Coordinator for Sediment Disaster Prevention Nagai Yoshiki
Typhoon 18	Oct. 7	Ibaraki Pref., Chikusei City (Kokai River)	Voluntary survey	River Dept., River Div. Senior Researcher Mori Hirotohi Researcher Fukuhara Naoki Researcher Takenaka Yuki River Dept. Flood Disaster Prevention Div. Researcher Hosoda Satoshi
Kinki Jurisdiction, Yuragawa-Okawa District, levee subsidence accident	Nov. 24 to Nov. 25	Kyoto Pref., Maizuru City (Yuragawa-Okawa District)	Request by Kinki RDB	River Dept., River Div., Head Hattori Atsushi Senior Researcher Mori Hirotohi Researcher Fukuhara Naoki
Nagano Pref. Northern Earthquake	Nov. 23	Nagano Pref., Otari Town	Request by Hokuriku RDB	Sabo Dept., Sabo Planning Div. Researcher Matsumoto Naoki
	Nov. 24	Nagano Pref., Hakuba Town Kamishiro District etc.	Request by MLITT Headquarters	Housing Dept., Housing Production Div. Senior Researcher Nakagawa Takafumi
	Nov. 26	Nagano Pref., Hakuba Town Kamishiro District	Request by MLITT Headquarters	Building Dept., Structural Standards Div. Senior Researcher Arai Hiroshi
	Nov. 26	Nagano Pref., Nagano City (Susobana Dam and Okususobana Dam)	Voluntary survey	River Dept., Large-scale Hydraulic Structure Div. Researcher Ito Takeshi
	Nov. 29 to Nov. 30	Nagano Pref., Hakuba Town Kamishiro District.	Voluntary survey	Housing Dept., Housing Production Div. Senior Researcher Nakagawa Takafumi
Damage by heavy snow starting Dec. 12	Dec. 19 to Dec. 20	Hokkaido, Nemuro City	Voluntary survey	Coastal, Marine and Disaster Prevention Dept. Senior Researcher Kumagai Kentaro

※ This table contains only immediate post-disaster emergency response. Technological support for emergency restoration and reconstruction that continued after this stage is omitted.

※ The personnel dispatched column is limited to employees of the NILIM (affiliation and office when dispatched)