Dispatching of experts and technical assistance activities in the event of a disaster

1. Introduction

The NILIM, which researches various fields related to housing and public capital provision, responds to an accident or disaster by dispatching experts to survey the state of the damage and to provide technical assistance with recovery and restoration. And it responds in various other ways: NILIM TEC-FORCE deployment, conducting surveys in response to requests from the regional development bureaus or local governments and as required by law, and carrying out its own independent surveys as part of research to contribute to disaster prevention and disaster damage mitigation.

2. NILIM TEC-FORCE

After a particularly large-scale disaster occurs and when ordered to do so by the Director of the Government Headquarters for Disaster of Land, Countermeasures of the Ministry Infrastructure, Transport and Tourism, the NILIM dispatches experts in various fields as the Advanced Technology Guidance Team of the Technical Emergency Control Force (TEC-FORCE) to the scene, where it surveys the state of the damage, evaluates the safety of facilities, and provides technology assistance to prevent secondary disasters.

In FY2013, experts were dispatched to the sites of disasters immediately after they occurred to provide technological assistance: the earthquake with its hypocenter near Awaji Island and an accident at the Kyoto Jukan Expressway extension work site (road field) in April, the Chugoku region torrential rain disaster (sewage systems field) in August, and to the sediment disaster (sediment control field) on Izu Oshima caused by typhoon 26 in October.

3. Other technological assistance

In the event of an accident or disaster, experts with advanced technology expertise in many fields are dispatched to the scene in various roles, to conduct surveys in response to requests from regional development bureaus or local governments in the disaster region, or in compliance with the Sediment Disasters Prevention Act or a directive from the Director of the River Improvement and Management Division. The experts who are dispatched carry out field surveys according to the state of occurrence of the disaster and at the same time, provide required technological assistance to officials on the scene and to ministry headquarters in preparation for emergency and permanent restoration. And they accumulate high precision data and other information immediately after the disaster and conduct research in order to propose future revisions to technology standards and new policies for disaster prevention.

In FY2013, torrential rainfall and sediment disasters struck throughout the archipelago—Niigata in July, Akita and Iwate in August, Fukui, Kyoto and elsewhere in September—then again in September, disastrous tornadoes struck the Kanto Region. After each event, the NILIM dispatched experts in sediment control, building construction, rivers and so on.

And when a storm surge disaster caused by Typhoon 30 struck the Philippines, the NILIM sent an expert as part of an international emergency rescue team and expert team (early recovery). It also sent JICA experts in response to a disastrous earthquake, also in the Philippines. They gave technological advice to Philippine government bodies to assist with the clarification of the damage mechanisms and support recovery and reconstruction.

Disaster	Day dispatched	Place dispatched	Reason	Personnel dispatched
Hurricane Sandy	Feb 24 to March 2	U.S. *	the Hurricane Sandy Survey Team	Director-General: KAZUSA Shuhei Research Center for Disaster Management Research Coordinator for Earthquake Disaster Prevention: UNJOH Shigeki River Department, Coast Division Head: SUWA Yoshio Research Center for Disaster Management, Flood Disaster Prevention Division Head: ITO Hiroyuki Earthquake Disaster Prevention Division: Senior Researcher: MABUCHI Toshiaki

Table. Dispatch of Experts in 2013 (December 2013)

TEC-FORCE

Disaster	Day dispatched	Place dispatched	Reason	Personnel dispatched
Heavy rain caused by low pressure from April 6	April 8	Tokyo Adachi Ward Kawaguchi and Toda Cities in Saitama Pref. (Arakawa River in Arakawa River System)	Survey under directive from the Director of the River Improvement and Management Division	River Department, River Division Head: HATTORI Atsushi Senior Researcher: MORI Hirotosh
Strong wind on April 7	April 11	Tsu and Iga cities in Mie Pref. (damaged wind power facility)	Request from the Building Guidance Division of the Housing Bureau	Research Center for Disaster Management Research Coordinator for Disaster Mitigation of Building: OKUDA Yasuo
Earthquake with hypocenter near Awajishima	April 16	Sumoto City in Hyogo Pref. (Sumoto Bridge) *	TEC-FORCE	Road Department, Bridge and Structures Division Head: TAMAKOSHI Takashi Senior Researcher: SHIRATO Masahiro Researcher: MIYAHARA Fumi
Island (April 13)	April 16 to 17	Sumoto City etc. in Hyogo Pref.	Independent survey	Housing Department, Housing Production Division Senior Researcher: NAKAGAWA Takafumi
Kyoto Jukan Expressway extension work site accident	April 24	Kyotango City, Kyoto Pref.	TEC-FORCE	Road Department Research Coordinator for Road Structures: MIZUTANI Kazuhiko
Heavy rain starting July 17	Aug. 1 to 2	Nagaoka City in Niigata Prefecture (Moriage, Teradamari)	Request from Niigata Prefecture	Research Center for Disaster Management, Erosion and Sediment Control Division Researcher: HAYASHI Shinichiro
	Aug. 5 to 6	Hagi City, Yamaguchi Pref. (Susa Purification Center) *	TEC-FORCE	Water Quality Control Department Research Coordinator for Wastewater System Restoration; OZAKI Masaaki
	Aug. 5 to 6	Hagi City and Yamaguchi City in Yamaguchi Pref. (Susa, Atohtokusa)	Independent survey	Research Center for Disaster Management, Flood Disaster Prevention Division Senior Researcher: YAMAMOTO Akira Researcher: ONAMI Hiroyuki
Heavy rainfall from Aug. 8	Aug. 10	Senboku City Akita Pref. (Kuyobutsu District) Iwate Pref. (National highway 46) *	Request from Akita Pref. Request from Tohoku Regional Development Bureau	Research Center for Disaster Management, Erosion and Sediment Control Division Head: KANBARA Junichi
Tornado on Sept. 2	Sept. 2 to 3	Koshigaya City, Matsubushi Town, Saitama Pref Noda City, Chiba Pref. *	Request from the Building Guidance Division of the Housing Bureau	Building Department, Standards and Accreditation System Division Head: ANDO Koji Researcher: KABEYASAWA Toshikazu Housing Department, Housing Production Division Senior Researcher: NAKAGAWA Takafumi
Heavy rain by a front on Sept. 4	Sept. 10	Nagoya City, Aichi Pref. (Shonai River on the Shonai River System)	Survey under directive from the Director of the River Improvement and Management Division	River Department, River Division Head: HATTORI Atsushi Senior Researcher: MORI Hirotoshi
Typhoon 18	Sept. 18 to 19	Obama City, Wakasa Town, Mihama Town in Fikui Pref.	Request by Fukui Pref.	Research Center for Disaster Management, Erosion and Sediment Control Division Head: KANBARA Junichi
	Sept. 18 to 19	Kyoto City and Fukuchiyama City in Kyoto Pref. Takashima City in Shiga Pref.	Independent survey	Research Center for Disaster Management, Flood Disaster Prevention Division Senior Researcher: YAMAMOTO Akira Researcher: ONAMI Hiroyuki

TEC - FORCE

Disaster	Day dispatched	Place dispatched	Reason	Personnel dispatched
	Sept. 20	Ritto City in Shiga Pref. (Anyoji)	Request by Shiga Pref.	Research Center for Disaster Management, Erosion and Sediment Control Division Senior Researcher: MIZUNO Masaki
	Sept. 24	Fukuchiyama City and Maizuru City in Kyoto Pref.	Request by the River Improvement and Management Division of the Water and Disaster Management Bureau	River Department, River Division Head: HATTORI Atsushi Senior Researcher: MORI Hirotoshi
	Sept. 27	Kyoto City in Kyoto Pref.	Independent survey	River Department, Coast Division Head: SUWA Yoshio Research Center for Disaster Management, Flood Disaster Prevention Division Head: ITO Hiroyuki Earthquake Disaster Prevention Division: Senior Researcher: MABUCHI Toshiaki (All the Hurricane Sandy Survey Team)
Typhoon 26	Oct. 16 to Nov. 2 (rotation system)	Oshima Town, Tokyo Pref. *	TEC-FORCE	Research Center for Disaster Management Research Coordinator for Sediment-related Disaster Prevention: WATANABE Fumito Erosion and Sediment Control Division Head: KANBARA Junichi Senior Researcher: UCHIDA Taro Researcher: HAYASHI Shinichiro Researcher: OKUYAMA Yuki
Earthquake with hypocenter near the Philippines (Oct. 15)	Nov. 18 to 22	Philippines*	JICA experts	Research Center for Disaster Management, Earthquake Disaster Prevention Division: Senior Researcher: MABUCHI Toshiaki
Typhoon 30	Dec. 2 to 15	Philippines	International emergency rescue team and expert team (early recovery)	River Department Research Coordinator for Water Environment: FUKUHAMA Masaya Research Center for Disaster Management Research Coordinator for Earthquake Disaster Prevention: KUSAKABE Takaaki

* This table presents only emergency responses immediately following a disaster: it does not include technology support for emergency restoration and final restoration undertaken continuously after the emergency response.

* Persons dispatched include only staff of the NILIM (Post and rank at time of dispatch)

* For dispatch cases marked with [*], see related articles in the report.