

# Establishment of bidding and contracting method for construction as disaster recovery under the direct management of the Ministry of Land, Infrastructure, Transport and Tourism

(Research period: FY 2016–2017)

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## 1. Introduction

Construction projects that the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) orders are based on the general public bidding method, which is a basic rule for accounting laws and regulations as a rule to ensure competitiveness and fairness. In the case of natural disasters, which have frequently occurred in recent years; however, MLIT is using special bidding and contracting methods, such as private contracts and selective bidding, which differ from regular methods to ensure quick recovery.

The Construction and Maintenance Management Division of the National Institute for Land and Infrastructure Management investigated the status of using special bidding and contracting methods adopted in recent major natural disasters and organized the basic concept of applying bidding and contracting methods to help ordering officials of Regional Development Bureaus to efficiently and properly select bidding methods for disaster recovery works.

## 2. Detail of the research

As shown in table 1, the research targeted five examples of significant damage to facilities under direct management of MLIT among the specified catastrophic natural disasters that have occurred over the past five years (2011–2016). The researchers gathered order-related documents for recovery construction in these natural disasters and organized and analyzed the ordering period of individual construction, details of notifications, adopted bidding and contracting methods, methods to select contractors, processing method, bidding procedures, and other relevant aspects.

The research found that private contracting was often adopted for emergency quick recovery work for about four months after the onset of a natural disaster. Among the full recovery projects, selective bidding was often adopted for one to twelve months after the onset of a natural disaster for construction with great time restrictions and not enough time for general public bidding, such as the necessity to complete construction before the flood season, for example. Meanwhile, after three months from the onset of a natural disaster, general public bidding was used for main recovery work, which

would allow a certain length of time for the bidding and contracting method. Based on these findings, table 2 summarizes the basic ideas of the bidding and contracting methods adopted during a natural disaster.

Table 1. Targeted natural disasters

Natural disaster	Damaged areas	Date and time
Great East Japan Earthquake	East Japan areas	March 11, 2011
Flooding in Kii Peninsula	Nara Prefecture and nearby areas	September 4, 2011
Heavy rain and landslide in Hiroshima	Hiroshima Prefecture and	August 19, 2014
Heavy rain and Kinugawa River flooding in Kanto and Tohoku	Ibaraki Prefecture and nearby areas	September 9, 2015
2016 Kumamoto earthquakes	Kumamoto Prefecture and	April 16, 2016

Table 2. Basic idea of selecting bidding and contracting methods

## 3. Conclusion

Type of construction	Urgency	Bidding and contracting method	Method of selecting contractors
Emergency recovery Full recovery (Onset to the first four months)	Extremely high	Private contract	The most appropriate contractors are selected based on the following perspectives [1] Past experience in maintenance and restoration work in disaster-hit areas [2] Status of disaster restoration work agreement [3] Probability of completing construction work (location of head office, status of damage that a contractor is suffering from, status of ongoing construction in nearby areas, past experience, etc.)
Full recovery (first 1-12 months)		Selective bidding	From competent candidates, contractors are selected based on the following perspectives to fairly distribute contracts among different contractors based on contracting and ordering status [1] Locations of head office (headquarters), branch offices, and sales offices [2] Past experiences of the same or similar types of construction [3] Status of ongoing constructions
Full recovery (after the first 3 months)		Regular method (general public bidding, general evaluation bidding method as a rule)	When regular methods allow quick responses

The findings of this research were reflected in the Guidelines for Applying Bidding and Contracting Methods for Disaster Recovery established in July 2017. The authors expect that the Guidelines will be useful for those who order construction at the regional development bureaus and municipalities when they have to quickly and properly select bidding and contracting methods for disaster recovery, which would improve the efficiency of recovering from major natural disasters that have occurred at high frequencies in recent years.

☞ For detailed information

- 1) The website of Construction and Maintenance Management Division, Research Center for Infrastructure Management, National Institute for Land and Infrastructure Management

<http://www.nilim.go.jp/lab/peg/gijutsujouhou.htm>