

Research Trends and Results

Role of Regional Construction Contractors in The Great East Japan Earthquake

OHASHI Sachiko, Senior researcher
 TAKEYA Shuichi, Head (Dr.Eng.)
 Research Center for Land and Construction Management
 Construction Economics Division

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1. Forward

Right after the outbreak of Great East Japan Earthquake, regional construction contractors started support activities for recovery of the infrastructure functions, which lead to large-scale rescue/relief efforts to disaster stricken areas. With this in mind, National Institute for Land and Infrastructure Management, Tohoku Regional Bureau and Tohoku Construction Association Federation, with the cooperation of Tohoku Univ. conducted a survey on activities by the regional construction contractors, and recorded and documented its role, to serve as an information for future disaster management.

2. Contents of this survey

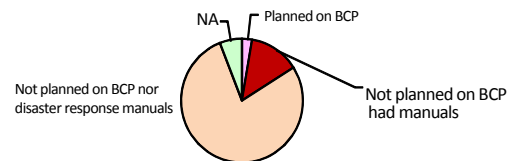
The survey was conducted in the form of questionnaires to 1,730 member companies in Tohoku Construction Association Federation on the activities between Mar.11 to 18. The questionnaire was distributed from Sep.to Oct. 2011, and 806 companies responded.

The contents of the survey are shown in Table 1. The survey was conducted principally on the support activities for the recovery of the infrastructure functions, including rescue and relief activities. Here, we are presenting part of the results on the effects and issues of business continuity plan (BCP) and disaster prevention drills.

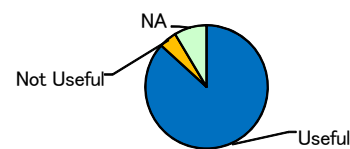
As for BCP and disaster response manual, 20% of the companies have laid out their plans before the Great Earthquake, of which 90% responded there were useful items (Graph 2) . As for its contents, many cited “plans concerning organization framework and chain of command”, are found to be effective. As a future improvement, it would be effective to make an assumption when telephone line is dead.

Table 1 Survey contents

Contents	Questions
Attribute	Basic info of the company, whether affected and if so, its level
Activity contents	Start to completion of activities and their details
	How to secure human resource, construction equipment, communication methods, fuel, goods for activities
	Reminders, difficulties faced and factors for breakthrough to enable swift activities,
Preparedness	Relationship between disaster agreements and support activities, planning on BCP/disaster response manual, conducting disaster prevention drills.



Graph1 Planning of BCP/disaster response manual



Graph2 Effect of BCP/disaster response manual

Slightly less than 20% conducted any disaster prevention drill one year prior to the Great Earthquake, of which more than 90% responded that it was useful in some way.

Also, another consideration is that joint drill with the administrative organization or other company will have different effect and both should be conducted in the future.

3. Conclusion

Other than what's been presented here, analysis is conducted on quick initial response, decision-making procedures on the support activities and disaster agreements, etc. results of which is due to be published. Also, National Institute for Land and Infrastructure Management has in the past surveyed the regional construction contractor's activities after The Iwate-Miyagi Nairiku Earthquake in 2008 and The Niigataken Chuetsu-oki Earthquake in 2007, results of which are to be analyzed.

【Reference】

- 1) Ohashi, Takeya, Mori : The 30th research presentation and discussion on construction management issues/ Effect of BCP, disaster response manual by regional construction industry in Great East Japan Earthquake, Dec.2012.
- 2) Ohashi, Takeya, Mori : Effect of disaster prevention drill by regional construction industry in Great East Japan Earthquake, ditto