

BCP for Korean Construction Industry by Benchmarking the Japan's Case

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Abstract— BCP (Business Continuity Plan) is a plan for preparing risks of business. BCP has been spread worldwide, and it has not been very long since BCP gets spotlighted in Korea. Therefore, it is hard to find good examples or guideline of BCP in Korea so it needs to benchmark other countries' cases. Japan Federation of Construction Contractors published "Business Continuity Plan Guideline for Construction Industry", and the guideline includes what construction companies need to do when their nation has been damaged. Therefore, this research proposes to apply the guideline to Korean construction industries by benchmarking of Japanese guideline.

Keywords— BCP, Benchmarking, Korea, Japan.

I. INTRODUCTION

It is highly important to continue or recover business when it is has been damaged by any unfortunate event. BCP (Business Continuity Plan) is the plan for preparing risks which can cause interruption of business. It has been spread worldwide, but it is not very long since BCP gets spotlighted in Korea so there is no example to refer. On the other hand, BCP is very popular and generalized in Japan because Japan is the country which suffers from a lot of natural disaster such as earthquakes, tsunamis and typhoons. In case of large scale disaster, a role of construction companies is very important because they are in charge of public restoration. It is for not only construction companies themselves but also public damage restoration. For that reason, Japan Federation of Construction Contractors published "Business Continuity Plan Guideline for Construction Industry (Construction BCP)" based on "BCP Guideline" published by Cabinet Office, Government of Japan. Since "Construction BCP" is good example, this research aims to suggest applying the guideline in accordance with the situation in Korea.

II. BODY

A. Difference of disaster type between Korea and Japan

"Construction BCP" is a guideline for construction companies to continue or recover their business and restore public damages when they and or their country get damaged by unexpected event. BCP's first goal is business continuity in all situations, but a point of "Construction BCP" is for continuing businesses and working public restoration work in emergency. For the reason, "Construction BCP" is considering earthquakes which occurs situations that need to be restored because it is the most frequent and powerful disaster in Japan. This is the biggest

difference between in case of Korea and Japan to apply "Construction BCP". Japan suffers from large-scale earthquakes with extensive damage frequently, but earthquakes are not severe disaster in Korea. According to Statistics Korea, the number of earthquakes magnitude 3.0 or greater is up to 18 times per year (2013), and the number of earthquakes which people could feel is up to 22 times per year (1999) from 1978 to 2014 in South Korea. In addition, there was any casualty and building collapse even though M5.8 earthquake which is the biggest earthquake in Korean history occurred in September 12th, 2016. Therefore, earthquakes are not eligible to be considered in South Korea.

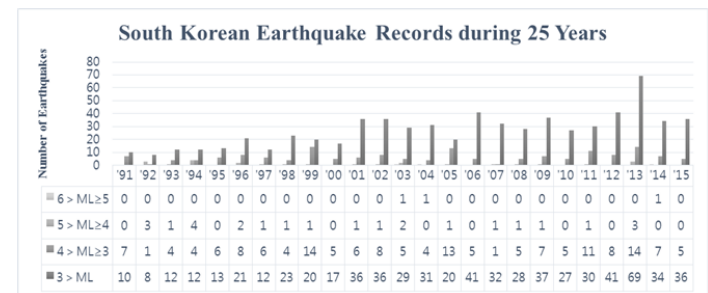


Fig. 1: A Graph of South Korean Earthquake Records during 25 Years

B. Application of "Construction BCP" to Korea

First of all, typhoons seem to be eligible to be considered in Korean version of "Construction BCP". Torrential rain damages properties most every year in South Korea, but it is because of its frequency. On the other hand, typhoons may cause severe damages which need to be restored by construction industry such as village destructions and landslides. In fact, according to National Typhoon Center, typhoons had an effect on Korea 3.1 times, caused 57 casualties and missing people, damaged property to the value of 133.6 billion won per year on average from 1904 to 2010. Furthermore, in the same period, top 10 property damage typhoon except "THELMA" (1987) occurred since 1990s, and five of them occurred since 2000s, so it is meaningful to assume typhoons as a consideration because damage by typhoons tends to increase recently.

Next, a part of preparedness needs to be reinforced because a considered disaster has been changed earthquakes to typhoons. For example, due to typhoon is a predictable disaster while earthquake is unpredictable, it is possible to prepare and prevent damages and secondary disasters. In case of the office, collapse of building is not expected as typhoon damages unless the building is already crumbling. Therefore, other efforts such as preparing emergency generator and communication system, backup of important information and prevention of flood need

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to be focused on instead of securing alternative base. In case of ongoing construction site, when typhoon watch or alert is issued, construction supervisors should make sure construction machineries and materials safe and stop all works before the typhoon comes.

C. Conclusion

This research proposes application of “BCP Guideline for Construction Industry” published by Japan Federation of Construction Contractors to construction industry in South Korea with consideration of difference between Korea and Japan. Consequently, the considered disaster and the suggestion of preparedness efforts have been changed to adjust to condition of South Korea. The typhoon damages which Korea usually get is not so serious compared to the earthquake damages which Japan usually get, but it should be a considered disaster of South Korea because it is the largest possible natural disaster. Since the considered disaster has been changed to typhoons which are quite predictable, the part of preparedness became more important than the part of responses. Only those two parts are suggested, but there are a lot more things to apply “Construction BCP” to South Korea. At the beginning, making companies establish BCP is the most important task because the most of Korean company has not established BCP yet. Especially, construction companies need to establish BCP in advance for preventing and mitigating damage and rapid recovery due to ongoing construction site is vulnerable to typhoon and easy to be dangerous. Furthermore, other characterized BCP guidelines for each industry are necessary to publish in the future. It is very suggestive of the role of government about disaster that the case that Japanese government keeps updating the guideline while even the conception of BCP has not been defined yet in Korea. Government of South Korea will have to provide desirable measure for the future disasters include BCP.

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