

EARTHQUAKE DEBRIS MANAGEMENT MASTER PLANS FOR THE MUNICIPALITIES

H. İskender⁻¹, L. Trabzon⁻¹, N. Erdoğan⁻¹

Address: ¹Istanbul Technical University, Center of Excellence for Disaster Management Akademik Kapı Girişi, Ayazağa Kampüsü, 34469 Istanbul Turkey

E-mail: iskender@itu.edu.tr, levent.trabzon@itu.edu.tr, nihanerdgn@yahoo.com and erdogannihan@itu.edu.tr

ABSTRACT Debris quantities at earthquake disasters are increasing. It is very important to prepare a debris management strategy and make an earthquake debris master plan for cities. Otherwise it might be very difficult and complex to have a successful debris management mechanism during the response and recovery phases of the disaster. This study explains the debris management planning systems and its core components as a master plan to be prepared and implemented by the municipalities in Turkey. It provides a tool for the preparation of debris management plans. The methodology used is a literature review and outlining a general debris management master plan. Although each city may have its unique plan depending on the hazard types, construction types, expected debris types and other factors; it is still possible to outline a general content for many municipalities. A plan should include mission, concept of operations, organization, responsibilities, actions and relevant appendices at minimum regardless of the city's unique characteristics. The concept of operations section includes information mainly about the activities to manage the debris clearance, removal and disposal with details of each related agency's responsibilities at each phase. The organization is one of the most important parts of the plan, because it is the management part of all the activities. It is usually recommended to base this management tool on Incident Command System although it is relatively a new and not-tested disaster and emergency management concept in Turkey. It should be a pre-planned organization system with all the roles and responsibilities being defined in details. It is expected to be flexible enough to adapt it to the conditions of the changing emergency environment. The responsibilities should be assigned for each action to take starting from immediately after a disaster to the late recovery stage. All related agencies should be well aware of their responsibilities and they should have their own plans with more detailed explanations of their own duties. It is very important to support these pre-defined responsibilities with regulations. Finally all the actions and procedures included in the earthquake debris master plan should be tested with exercises and necessary updates based on lessons learned and changing regulations are to be done to keep the plan as a living document. The study ends with the discussion of the necessity for the debris management master plans for the municipalities besides a disaster master plan.