Chapter 2
Shaping Comprehensive Emergency Response Networks

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ABSTRACT

Given its nature, a crisis has a significant community impact. This applies in particular to emergencies: crises that arise quickly. Because of the complex and multifaceted nature of large-scale incidents, the response requires coordinated effort by multiple organizations. This networked collaboration is not solely restricted to professional organizations. In responding to an incident, the affected community can itself be an important source of information and capabilities. This chapter discusses how one can shape a trustworthy and decisive response organization in which relevant and useful capacities available in the community are incorporated. This discussion has two focal points. The first focal point is the role of the affected community in the case of an emergency. On the one hand, an emergency affects the fabric of the community, such as the critical infrastructure. On the other, a community has inherent internal resources that give it resilience and capacity to respond in a crisis. This needs to be reflected in the choice of emergency response planning model. The second focal point is the structure of the emergency response network. An emergency response network is a mixed-sector network. This means that coordination is needed among organizations and collectives with differing strategic orientations.

INTRODUCTION

Because of the complex and multifaceted nature of large-scale safety and security incidents such as floods and severe power outages, the response requires coordinated effort by multiple organizations. Some organizations are involved in the response because of their societal responsibilities. In the Dutch system for example, in principle, an emergency situation does not affect the regular allocation of responsibilities. Responsibilities in normal circumstances are still valid in an emergency situation (Brainich, 2012). Other organizations are involved because they can provide relevant information, knowledge or capabilities. In a densely populated and complex community, even a relatively small incident often requires the involvement of and collaboration among twenty or more organizations (Treurniet, van Buul-Besseling, & Wolbers, 2012). This collaboration is

not solely restricted to professional organizations. Scholars (Dupont, 2004; Dynes, 1994; Helsloot & Ruitenberg, 2004; Lindell, Perry, Prater, & Nicholson, 2006; Nakagawa & Shaw, 2004; Quarantelli & Dynes, 1985), policy-makers and practitioners stress that, in responding to an incident, the affected community can itself be an important source of information and capabilities. On the one hand, this acknowledges the limitedness of the potential of professional emergency response (ER). On the other, this reflects and recognizes the resilience of communities. The key question in this chapter is: what does this mean from the perspective of the response organization? How can one shape a trustworthy and decisive response organization, in which relevant and useful capacities available in the community are incorporated?

Setting the Scene

In this chapter, a *crisis* is defined as an event in which safety or security are at stake because one or more vital community interests are affected while the regular structures and resources are not sufficient to maintain stability. The wording of this definition is derived from the one used by the Dutch government (Ministerie van Veiligheid en Justitie, 2013). Substantively, this definition is in line with those used by Boin, 't Hart, Stern, and Sundelius (2005, p. 2) and Stern (2003) although their formulations are more geared to national and international politics. Given its nature, a crisis has a significant community impact. The extent and the nature of this impact can be very diverse and

compound. The impact is concrete if ecological or physical safety are at stake, in cases of environmental pollution or large-scale power outages. The impact is more abstract or psychological if territorial or economical security or social/political stability are at stake – as in a financial crisis, for example. The functioning of the community depends heavily on critical infrastructure facilities, such as transportation modes, telecommunication facilities, energy networks and provision of drinking water facilities (Luiijf & Klaver, 2006). This is worsened by the fact that these facilities are interdependent (Luiijf, Nieuwenhuijs, Klaver, Eeten, & Cruz, 2008). Furthermore, incidents can also have a big impact because the role of information within the community has changed. In particular, because of the widespread use of social media, community perceptions of an incident and public opinion can be influenced easily and strongly. An incident which in itself may be limited in nature can easily evoke strong feelings and lead to social unrest.

A framework to differentiate among several types of crises can be derived from Boin et al. (2005, pp. 16, 94, 95). The framework differentiates between crises based on rise rate and recovery rate. The rise rate denotes the speed at which a crisis unfolds, and the recovery rate denotes the speed at which a crisis is resolved. Table 1 outlines the framework.

This chapter focuses primarily on crises with a fast rise rate. Particularly in this type of crisis, it is difficult to gain rapid insights into the impact, especially over the longer term. In the chaos and

Table 1. Crisis classification framework; after Boin et al. (2005)

Recovery rate vs. Rise rate	Fast	Slow
Fast	Fast-burning Crisis (e.g. large fire)	Long-shadow Crisis (e.g. earthquake, tsunami)
Slow	Cathartic Crisis (e.g. tracing and dismantling a threatening terrorist organization, gradually escalating international tension followed by a sudden resolution)	Slow-burning Crisis (e.g. climate change, population ageing)

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