

Improving the initial response process in urban emergencies

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Abstract

Growing population and service interconnection make urban areas increasingly vulnerable to emergency situations. Although the firefighting response process plays a key role in most urban emergencies, it has remained essentially unchanged in the past decades; therefore it has several limitations to coordinate effective and efficient response activities. This paper studies the firefighting initial response process in order to measure, understand and improve it. The study involved a literature review, interviews with firefighting personnel and the analysis of 66 urban emergencies in the city of Santiago (Chile). Based on the obtained results this article proposes an emergency coordination system to improve the initial response process in urban emergencies. In order to realize the impact of the proposed system on the initial response process, a simulation based on past emergencies is presented and discussed.

Keywords

Fires, Companies, Chemicals, Resource management.