

Author's Accepted Manuscript

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PII: S1071-5819(16)30044-1
DOI: <http://dx.doi.org/10.1016/j.ijhcs.2016.05.001>
Reference: YIJHC2034

To appear in: *Journal of Human Computer Studies*

Received date: 20 July 2015
Revised date: 29 March 2016
Accepted date: 3 May 2016

Cite this article as: Bartel Van de Walle, Bert Brugghemans and Tina Comes, Improving Situation Awareness in Crisis Response Teams: an Experimental Analysis of Enriched Information and Centralized Coordination, *Journal of Human Computer Studies*, <http://dx.doi.org/10.1016/j.ijhcs.2016.05.001>

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Improving Situation Awareness in Crisis Response Teams: an Experimental Analysis of Enriched Information and Centralized Coordination

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Abstract

In responding to an emergency, the actions of emergency response teams critically depend upon the situation awareness the team members have acquired. Situation awareness, and the design of systems to support it, has been a focus in recent emergency management research. In this paper, we introduce two interventions to the core processes of information processing and information sharing in emergency response teams to analyze their effect on the teams' situation awareness: (1) we enrich raw incoming information by adding a summary of the information received, and (2) we channel all incoming information to a central coordinator who then decides upon further distribution within the team. The effect of both interventions is investigated through a controlled

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