Ensuring Public Safety Organisations’ Information Flow and Situation Picture in Hybrid Environments

Teija Norri-Sederholm, National Defence University, Helsinki, Finland
Aki-Mauri Huhtinen, National Defence University, Helsinki, Finland
Heikki Paakkonen, Arcada University of Applied Sciences, Helsinki, Finland

ABSTRACT

This article describes how Public Safety Organisations (PSO) come up against hybrid, demanding operations like terrorist attack or school shootings more frequently. Obtaining a realistic situation picture is crucial in organising the rescue operation and in minimising further violence. The role of PSOs’ 24/7 situation centres becomes vital. In this paper, the authors explore how PSOs can ensure an information flow and a situation picture in hybrid environments. The empirical data were official reports and the data collected through interviews with staff at different PSOs. It was analysed using qualitative content analysis. Achieving a common operational picture involves taking account of each authority’s needs and constraints, thereby enabling the exchange of relevant information between key authorities on-scene and off-scene. In addition, human factors play an important role in complex, multi-authority missions. Furthermore, the increasing role of citizens and social media in producing valuable information should not be overlooked.

KEYWORDS
Common Operational Picture, Hybrid Environment, Information Flow, Multi-Authority Co-Operation, Situation Centre, Situation Picture

1. INTRODUCTION

Public Safety Organisations (PSO) are safety authorities such as Police forces, Fire and Rescue services, Emergency Medical Services (EMS), the Border Guard, and Emergency Response Centres. The PSO come up against hybrid, demanding operations like terrorist attack or school shootings more frequently. Obtaining a realistic situation picture while the operation is still ongoing, and the perpetrator is still at large, is crucial to the rescue operation and for minimising further violence. In Finland, there have been two school shootings, several other shooting attacks, and one attack in August 2017, which is currently under investigation as terrorism. From the operative actors’ point of view, situation is dangerous and very stressful. Perpetrators will typically continue killing victims until they run out of ammunition or cannot locate any more targets. These scenarios are referred to as amok situations, where the violent attack is carried out in blind rage. It is a question of taking one’s own life and the life of others. (Strahler & Ziegert, 2014; Gerard et al., 2016) This account goes for most of the terrorism type of attacks. During the last years, the PSO’ operational environment has changed. The situations can nowadays be unpredictable meaning the guidelines and planned action

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models do not necessary work. Actually, it is about the change that has happened in adversaries. Mattis and Hoffman (2005) have described that the enemy or adversary in hybrid environment is a human being with the capacity to act by using rules and creative ways that come to us to surprisingly way. They do not follow our ways of acting. They can use political, social, military and criminal actions in the multiple ways. They may use unexpected way of technological solutions (social media) together with traditional kinetic influence (terrorism or sabotage for example). Forthcoming wars and conflicts will not anymore be in deserts and forests. Instead, they are where the people are. The cities have become hybrid battlefields with the result that citizens are afraid of bomb and cyberattacks. (Graham, 2010.)

1.1. PSO’ Situation/Command Centres
The PSO’ situation/command centres play a vital role in demanding multi-authority operations. In the acute operative phase, they support the operative field management, participate in decision-making and, in some cases, assume overall responsibility. In Finland, there is just one Police organisation with 11 Police departments acting under the state, and two 24/7 Police command centres covering the whole country. In addition, the other Police departments have their own situation centres acting under officer command from 8am to 4pm. Outside office hours, officer-level command services are provided by the two command centres. Field managers always oversee the operative management in the areas. However, the total control, policy definitions and decisions to deploy the force are made in the Police command centre. The Coast Guard, which is part of the Finnish Border Guard, is the leading search and rescue (SAR) authority at sea and the maritime law enforcement authority with a variety of duties. They have two maritime command centres working closely with other PSO. The municipal authorities, Fire and Rescue services and EMS have 22 areas with situation centres. Each authority and area organises the running of the situation centre differently. These situation centres provide different types of services needed in the field during an operation. An important part of their duties is to take care of the areal resources and work proactively, collecting information about factors that may disrupt daily work. Thus, one important function of a situation centre is to make forecasts and inform all the relevant authorities. After the Indian Ocean tsunami in 2004, the need for a Government Situation Centre was recognised, and one was duly set up in 2007. The purpose of the Centre is to combine information from the authorities with open sources of information, and to report to the Government and other authorities on the basis of the findings.

1.2. Key Concepts, Roles and Challenges
The terms situation picture, situational awareness (SA), and common operational picture (COP) are often mentioned when describing the success factors in multi-authority operations. The situation picture and situational awareness are related concepts with several different definitions. One of the interpretations for situation picture is a “continuously maintained description of the situation and operational environment built from received information and the conclusions based on it” (Seppänen & Valtonen, 2008) whereas situational awareness is “knowing what is going on so you can figure out what to do” (Adam, 1993). The situation picture is one of the most important tools in managing operations, calling for actors’ subjective SA. A common operational picture, originally a military concept, means a single presentation to display all collected and combined information for the user (McNeese et al., 2006). It is used to overcome coordination and information management problems among different organisations and services at different locations during an emergency response (Wolbers & Boersma, 2013), and for enabling situational awareness.

The roles of inter-organisational information-sharing, communication, and cooperation are crucial for PSO in forming a situation picture and a COP in multi-authority operations. A COP supports understanding between each of the authorities, takes account of their needs and constraints, and enables the exchange of relevant information between key authorities on-scene and off-scene
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