

Network Centric Emergency Management: Options for Filling a Strategic Void in Interoperability Thinking



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THE PROBLEM: Traditional emergency management approaches are linear and siloed and not agile enough to meet today's complex and dynamic environment. Organisations endeavour to become interoperable, however with the current thinking, this simply moves the solution from one silo to another. A strategic void exists within interoperability thinking and without collaborative innovation and a network¹ centric approach, emergency management practices will continue to lack the agility and capability to respond and recover effectively from dynamic and evolving threats.

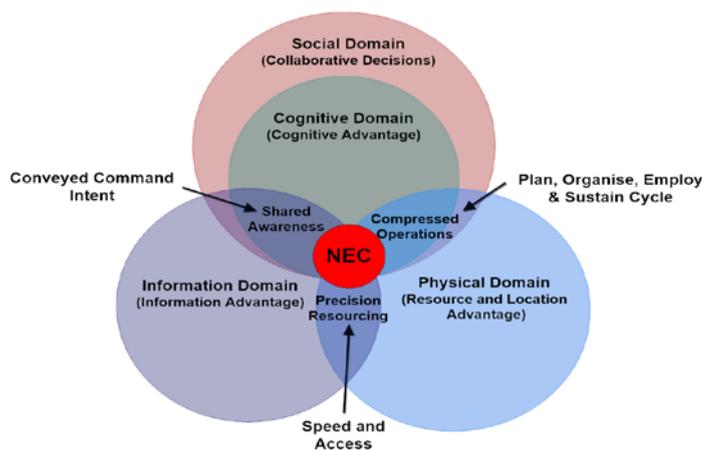
THE PROBLEM IS COMMON

Many organisations take a traditional, linear approach to emergency management which often sees capability established and implemented at individual business or organisation level.

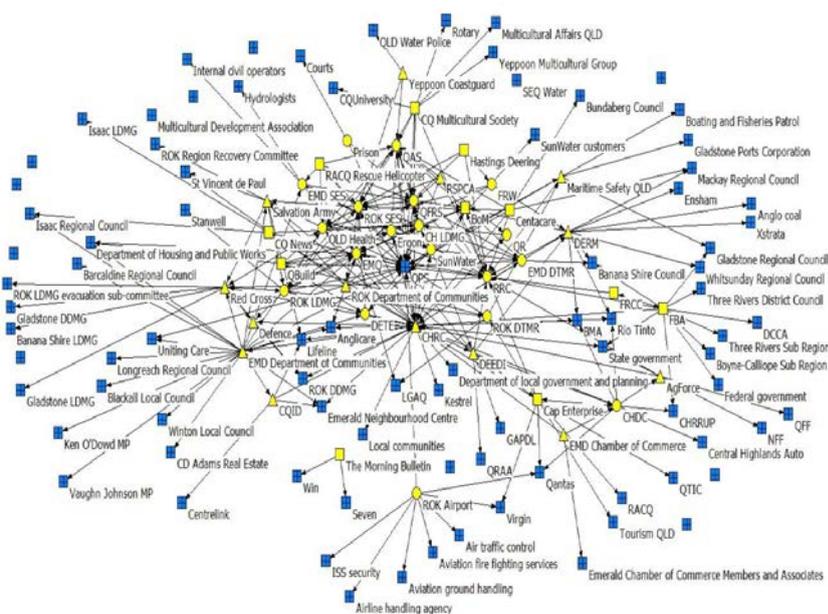
Interoperability continues to be touted as the penultimate solution to achieving an efficient and effective emergency management capability, however in the current environment interoperability is most commonly referenced in relation to the information and communication technology domain of an organisation. A solution once again siloed and linear in it's approach.

The current reality of emergency management arrangements is represented in the diagram below. Multiple parties, sharing a common intent with little or no network centric practices makes for extremely conflicted and ineffective response and recovery capabilities.

Network Enabled Capability Domains³



The network of collaboration for Central Queensland during flood operations²



THE SOLUTION MUST BE SHARED

This research seeks to explore how the adoption of network centric concepts to emergency management operations will broaden interoperability thinking to achieving the required capability across the mutually dependant information, cognitive, physical and social domains.

AND WITH THE SOLUTION COMES THE REWARDS:

The expected outcomes of this research include:

- Development of an innovative, future proof interoperability framework based on network centric concepts applicable across the spectrum of emergency management operations.
- A process to quantify (where possible) interoperability maturity to assist individuals and organisations to develop strategies to improve their network enabled capability.
- Creation of an interoperability knowledge base that can be used to guide strategy and capability development in the future.

FOOTNOTES

- A network consists of nodes (entities) and the links among them. Nodes do things (sense, decide, act) and information, both as inputs to decisions and in the form of decisions themselves, is passed over links from one disaster space entity or node to another.
- Kinnear, S, Patison, K, Mann, J, Malone, E, Ross, V 2013, Network governance and climate change adaptation: collaborative responses to the Queensland floods, National Climate Change Adaptation Research Facility, Gold Coast, pp. 113.
- Adapted from United States Office of the Secretary of Defense 2005, The Implementation of Network Centric Warfare. Washington: United States Office of the Secretary of Defense.

