

Emergency Operations Centres : Between Chaos and Complexity

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Presentation outline

- Definition and features of EOCs
- Factors of complexity
- Factors of chaos
- Conditions for successful EOCs



Calgary floods
2013

Definition of an Emergency Operations Centre

- The physical location at which the coordination of information and resources to support domestic incident management activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, and medical services), by jurisdiction (e.g., Federal, State, regional, county, city, tribal), or some combination thereof.

FEMA (2008) ICS Glossary.

<https://training.fema.gov/emiweb/is/icsresource/assets/icsglossary.pdf>



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The United Nations Office for Disaster Risk Reduction

Emergency Operations Centre (EOC)

- The emergency operations centre represents the centre of activity and direction when it is necessary to deal with the impact of disasters

Perry, R.W. (1995) The structure and function of community emergency operations centres. Disaster Prevention and Management. 4 (5)

- The emergency operations center is both a function and a location or place.

Herman, R.E. (1982) Disaster Planning for Local Government, Universe Books, New York, NY

The six primary functions of EOCs

- Coordination
- Policy making
- Operations
- Information gathering
- Public information and
- Hosting visitors



Ontario Provincial EOC

Quarantelli, E.L. (1979) Studies in Disaster Response and Planning, University of Delaware Disaster Research Center, Newark, DE

EOC composition

- The EOC is staffed by a variety of function-relevant officers charged with oversight and coordination of key features of managing the emergency at hand.

Perry, R.W. (1985) Comprehensive Emergency Management , JAI Press, Greenwich, CT

How many organisations engaged in the response system in the aftermath of the WTC attacks?

1,607 organisations

Of which:

- 77 public and private international organizations
- 1,530 domestic organizations
 - 1,176 non-profit organizations
 - 149 private organizations
 - 73 federal organizations
- Kapucu, N. (2003). Public-non-profit partnerships (PNP) in dynamic context: The World Trade Center attack in New York City, September 11, 2001. Unpublished doctoral dissertation, University of Pittsburgh, PA.



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How many organisations engaged in the response system in the aftermath of hurricane Katrina?

535 organisations

Of which:

- 20 international organisations
- 515 domestic public organisations.
 - 146 subregional, parish, and municipal organisations
 - 78 state organisations
 - 69 federal organisations
- 81 non-profit organizations
- 137 private organisations

Comfort, Louise K ; Haase, Thomas W (2006) Communication, Coherence, and Collective Action: The Impact of Hurricane Katrina on Communications Infrastructure, Public Works Management & Policy, April 2006, Vol.10(4)

What is this telling us about emergency operations centres?

Factors of complexity

- The nature and scope of the disaster
- The type of impact
- The nature and volume of the consequences
- The number of jurisdictions and organisations involved
- The limitations of pre-existing arrangements
- The diversity of management structures and systems



CNSC -
Fukushima
2011

Factors for chaos

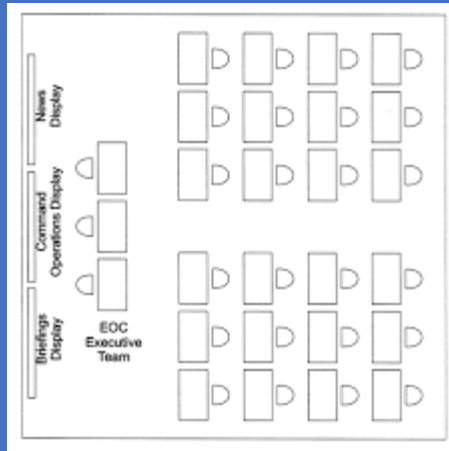
- The disregard of normal emergent social behavior
- The absence of shared situational awareness
- The strict adherence to roles and responsibilities
- The resistance to collaborate
- The rigid implementation of standard operating procedures (SOP)
- The political and media contexts

Conditions for successful EOCs

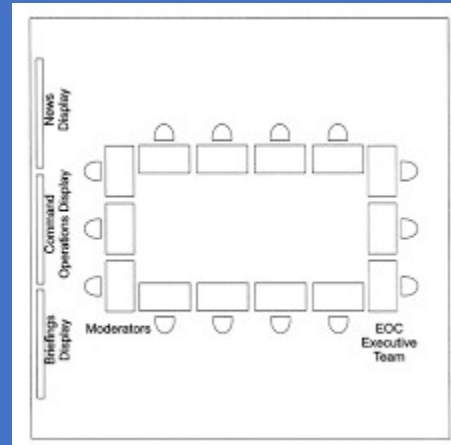
Establish the scope and specific functions of the EOC

- Jurisdiction, territory,
- Service(s) to provide
- Primary function (Command and control, coordination, operations support)
- Anticipation period
- Key stakeholders

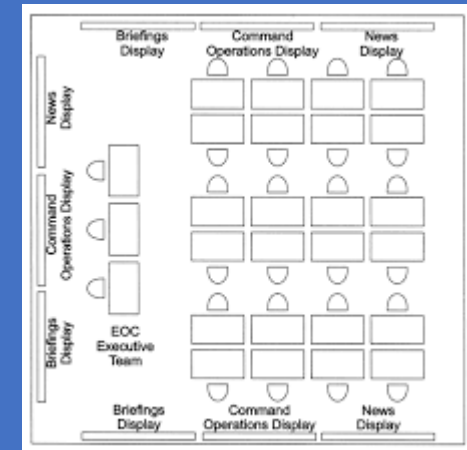
Adopt an EOC layout supportive of the scope and functions



Command and control
Operations support



Coordination



Build cohesive EOC management teams

- Identify required key competencies
- Assemble (2-4) teams to ensure continuity of operations
- Establish a training calendar
- Adjust alert/notification systems to sustain capacities
- Assess teams' performances

Train the teams on collective processes

- Team building
- Collaboration and information management
- Evolving situational awareness
- Emergent issues identification
- Inclusive decision making

Exercise the EOC teams on collaborative efforts with other EOCs

- Identify relevant partners' EOCs
- Arrange/participate in joint training opportunities
- Establish an exercises calendar
- Conduct 360 assessments
- Document lessons learned
- Share reports



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Implement systemic knowledge management

- Record planning documentation
- Record training and exercises results
- Record EOC decisions and rationale
- Record operations outputs and outcomes
- Reinvest lessons learn into the EM program

Questions / Comments

Thank you for your participation!

Michel C. Doré

LinkedIn