



Addressing Emergency Decision Making in Complex incidents: Implementation of Advanced Incident Command System in Eskom

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Incident Command System

Eskom has chosen to integrate its emergency structures Incident Command System (ICS), partly because it is also being adopted by the South African emergency response community. ICS is an organisational system developed to:

- Manage incidents of any size.
- Allow agencies with different mandates to coordinate their activities
- Provide a planning process that delivers a plan to personnel on the ground.

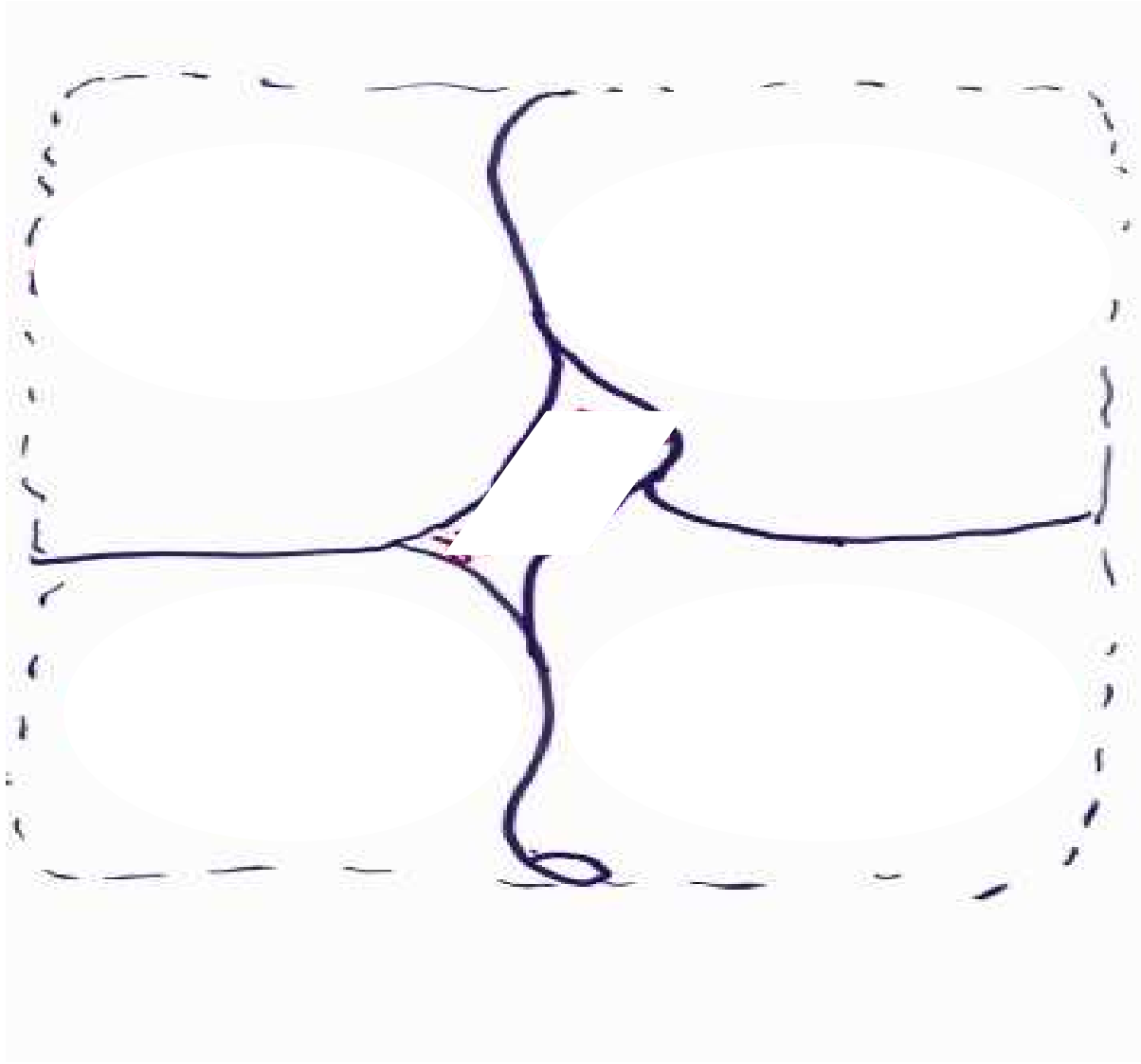
ICS can manage large emergencies once the details of the emergency are known and the systems necessary to track the incident are in place.

However:

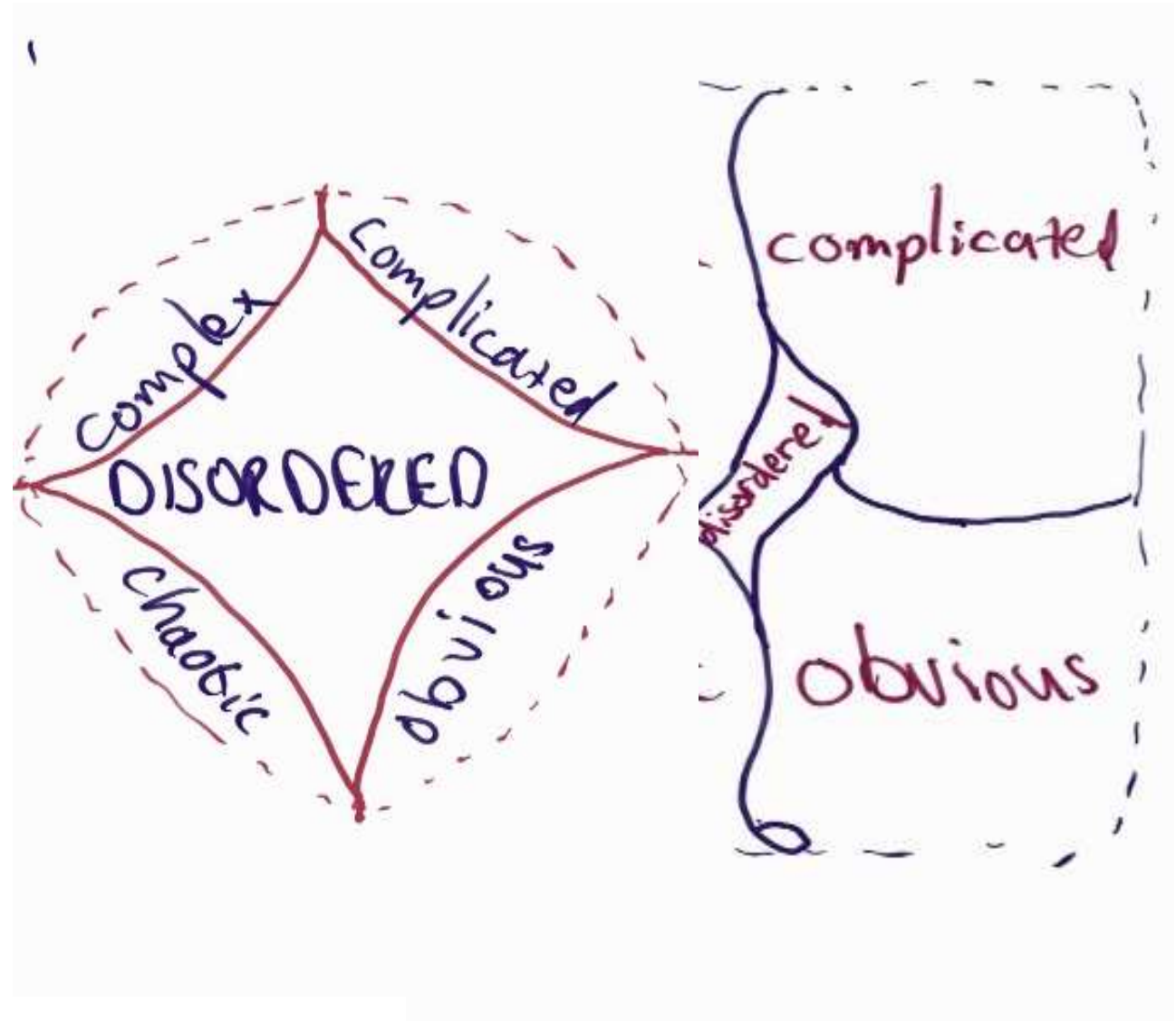
- In the first hours of a major incident, one cannot get an accurate enough understanding of the incident to develop a plan that can resolve the incident.
- The impact of a major incident or disaster depends on how long the incident continues without effective management.
- Addressing this will require careful consideration of how decision-making is undertaken and what is required to be in place for this to be effective.



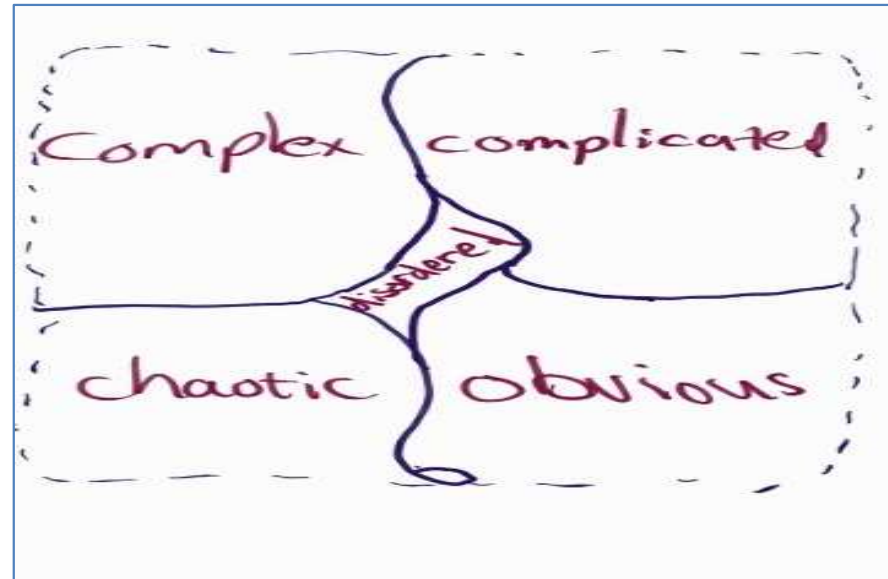
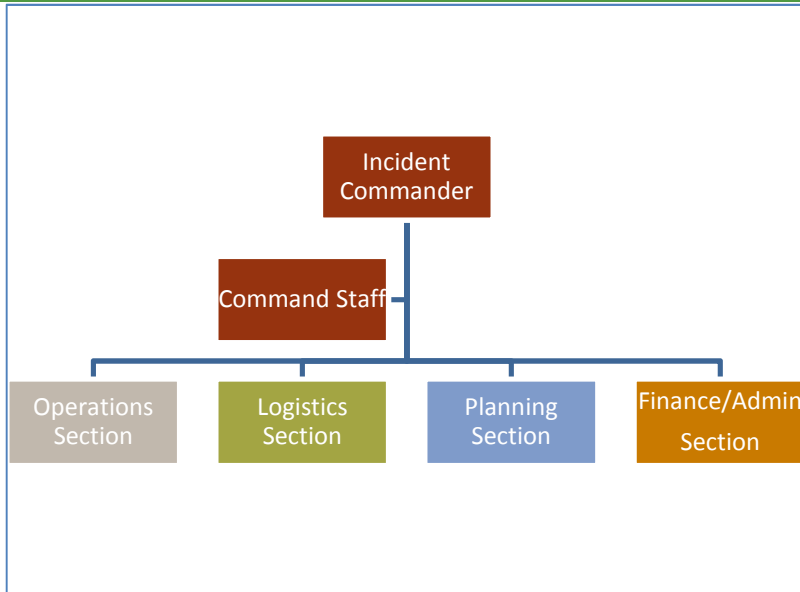
Cynefin



Cynefin at the beginning of an incident



Combining them 1



Both need a lot of accurate information to achieve their aims

Incident Action Plans

Safe to fail experiments

Regular planned operational periods

Adaptive feedback cycles

Incident objectives

Heuristics

Combining them 2

What actions should be taken by those affected at the onset of the emergency?

- Personnel must respond assuming their actions will be considered appropriate.
- “...socially innovative agency cannot be presupposed... the crucial game-changing effect is to start the game by activating the players.”
- Eskom personnel have mandates to pursue even in extreme contexts.
- Incident managers rely on the completeness/quality of the available data.
- There are many dangers in the first sets of information

Cynefin- safe to fail experiments :

- Plans being implemented by personnel on the ground in their local initial attacks can have metrics attached to them that allow the emergency responders to put together a picture of the situation.
- Plans being developed for large incidents have “front loaded” context probes
- Unplanned for information cannot be ignored, so placeholders for this information are needed



Legislative context

Legislative constraints and support

Emergency managers often work against competing claims in an organisation. The Disaster Management Act specifies measures that could support the management of an incident in the first few hours:

Institutional Arrangements:

Response teams are assigned, developed and primed to respond to an incident. Arrangements are made with external role-players who are primed to respond to an incident for an integrated and coordinated plan. Mutual aid agreements form part of the preparedness expected by the DMA.

Preparedness and Response Measures:

The emergency response plans can be used to meet the proposals in this paper:

- Plans that provide personnel on the ground clear and useful guidance on how to execute an initial attack in the face of a disaster
- Metrics that can be used to rapidly develop an IAP
- The personnel must be made aware of the need to inform the emergency coordinators so as to accelerate the development of an IAP.



Conclusion

- ICS supports the management of incidents when there is enough information for IAPs.
- The IC is required to probe the context of the incident and make decisions, whilst not understanding the full context of the incident, that enhance the “*evolutionary potential of the present*”, including reputational impact.
- Multi-agency response requires decision making in multiple decision domains.
- By mapping Cynefin activities onto the emergency response space, such as using IAPs as incident probes in place of safe to fail experiments, the largely disordered beginning of an incident can be interrogated and shortened.
- The implementation of IAPs over multiple operational periods will assist in moving the incident from the *complex* to the *complicated* domain.
- ICS decision makers can use Cynefin to
 - shorten the period of the incident in which there is insufficient information
 - make decisions with more insight for the duration of the incident
 - make use of the complexity within the incident context itself.

