



Simulation tools and Crisis management

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A Changing Practice





Scope of Practice





Authorities

Response Organizations

Militaries

Multi National Structures

Media

Donors

Multi National Organizations (NGO)

Local NGO

Ad Hoc NGO





Everyone is a Crisis Manager



The Practical implications

- Our decisions / suggestions are and will be questioned
- We will have to convince – the decision makers, the public... we can no longer – “order the public”
- “In G-D we trust, the others will bring us data”
- We live in a world of competing values



CRISMA Solution

The word "CRISMA" is written in a large, bold, red, sans-serif font. Above the letter 'I' is a red Wi-Fi symbol consisting of three concentric arcs and a central dot. The background of this section is a blurred image of emergency responders in orange and blue uniforms attending to a patient on a stretcher.

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Modeling tools

□ Impact Scenarios –

required to assess the effectiveness of pre-event interventions (mitigation activities) on the impact of the hazardous event.

- Strengthen of existing buildings against E.Q
- Number of available responders and their deployment pattern.
- Flooding models, levies, and flood buriers.
- Forest fires propagation models.



Modeling tools

□ Impact Scenarios – challenges:

- Good models for physical phenomena
- Need for models for interdependencies and cascading effects.
- Need to model human factors (???)
- Values attached to facts and figures (human lives)
- Decisions are not always rational



Modeling tools

- ❑ Effect scenarios – The problem –
 - in training (especially in table top exercises) it is extremely difficult to demonstrate the effects of decisions taken and limitations of resources (availability, time of arrival, response capacity – exists in “war game” systems). As a result commanders lack in their resource planning capacity.
 - For planned operations (airport response plans, sports events), the effect models are necessary to plan amount of resources deployed and their positioning.



Modeling tools

- ❑ Effect scenarios – The challenges–
 - Human behavior – no models available. The tool will be limited to measurable phenomena and pre defined assumptions on behavior.
 - Need to create a “user friendly” tool that will enable self use.
 - Need for a web based tool that will enable remote and multiple users to use the system.
 - Need to create a modular system that can be easily transferred from one reality to other / enable multiple scenarios with minimal work.



Thank you
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