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# WP5 – Approaches and Solutions Identification

*Initial discussion*



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*Prague, 7 September 2011*

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# WP5 – Objectives



1. Specify approaches and promising solutions that are available (or mature), to be involved/elaborated in Phase II (Demonstration and Experimentation environment)
2. List promising solutions (not ready for demonstration yet), that require substantial further R&D in future Work Programmes.

## Milestone

Delivery of report D5.1 “Approaches and Solutions” (February 2012)

***PO (14 April 2011): “Think also out-of-the box”***

# WP5 – Input



Results from previous/on-going ACRIMAS WPs:

- WP2 - Framework and Misfits / Vulnerabilities D2.1, D2.2
- WP3 - Scenarios (relevant missions and tasks) D3.1, D3.2
- WP4 - User needs, requirements and gaps D4.1, ...
- WP7- Workshops (2<sup>nd</sup> in Prague) D7.5.2

# WP5 – Work-Break-Down



- Task 5.1 – Identification of candidate solutions [TNO]
- Task 5.2 – Technological feasibility [TSOFT]
- Task 5.3 – Synthesis of D&E\* topics [TNO]
- Task 5.4 – Future R&D\*\* needs [NCSR D]

\* Demonstration & Experimentation

\*\* Research & Development

# WP5 – Time schedule



August 2011 – February 2012:

- *Preparation (Conceptual model)* AUG
- T5.1 – Identification of candidate solutions SEP - OCT
- T5.2 – Technological feasibility OCT - NOV
- T5.3 – Synthesis of D&E topics NOV - DEC
- T5.4 – Future R&D needs DEC - JAN
- *Writing D5.1 Approaches and solutions* JAN - FEB

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## Task 5.1 – Identification of candidate solutions



Step 1: Quick-scan to identify solutions to solve identified gaps:

- Kick-off – workshop on 8 September
- Structured approach

Step 2: Select solutions on their relevance:

- to cope with ‘crisis characteristics’, as defined in WP3
- to solve ‘gaps’, as identified in WP4

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## Task 5.1 – Quick-scan sources



ACRIMAS experts knowledge:

- Consortium (11 partners!)
- Advisory Board, Expert group, Workshop participants

R&D 'state-of-the-art':

- EU: FP6, PASR, FP7
- UN, NATO, NGOs (e.g. Red Cross, MSF)
- National: MS, non-MS (e.g. US)
- Industry / Universities
- ...

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## Task 5.2 – Technological feasibility



Investigation of selected technological solutions:

- Assessment of maturity (including time-to-market)
- Usability in different crisis circumstances
- Upgradeability
- Interoperability between solutions
- Affordability (Costs/Benefits)



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## Task 5.3 – Synthesis of D&E topics



Two sub-sets of solutions:

1. Relevant and feasible  
⇒ Phase II (WP6, Roadmap)
2. Relevant and promising but requiring additional R&D  
⇒ Future Work Programme(s) (Task 5.4)

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## Task 5.4 – Future R&D needs

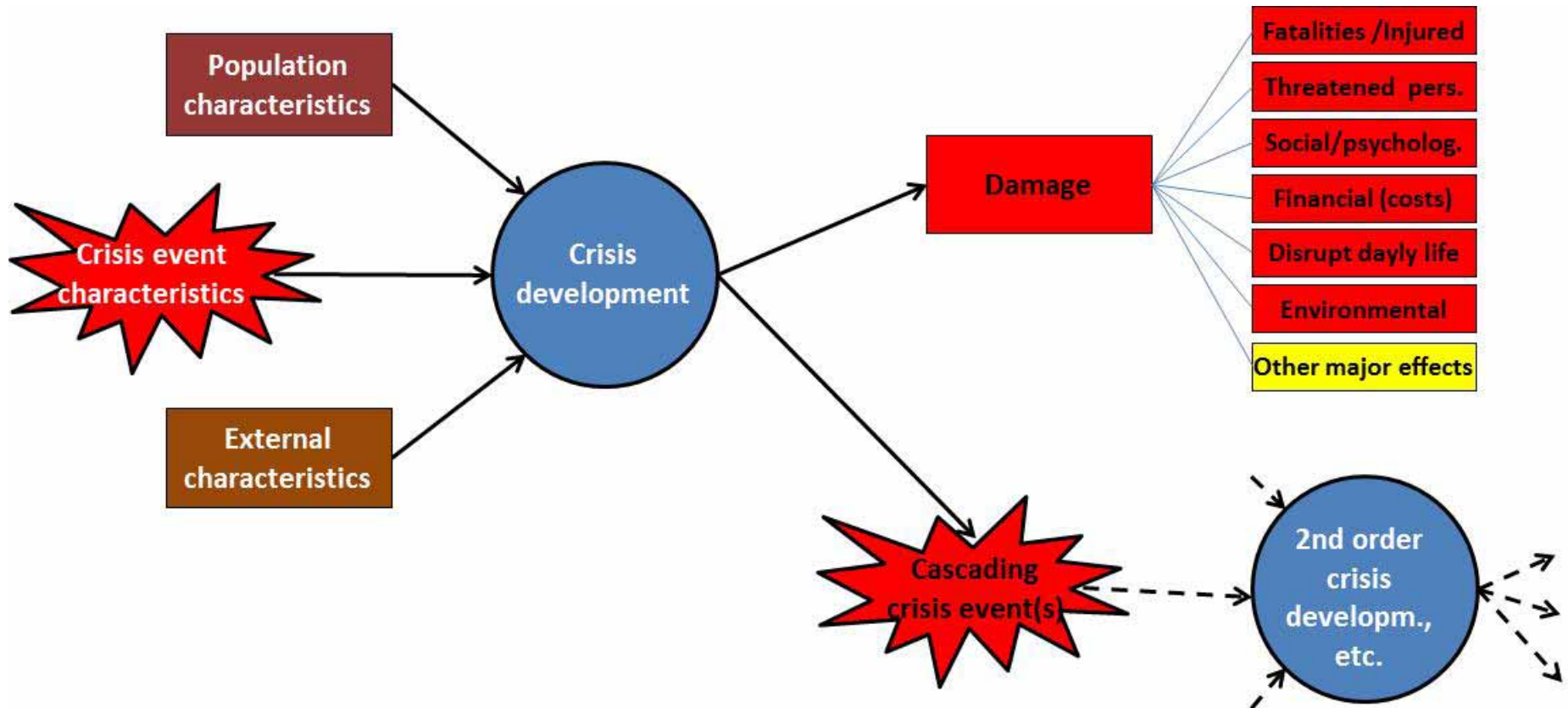


Elaboration of required R&D:

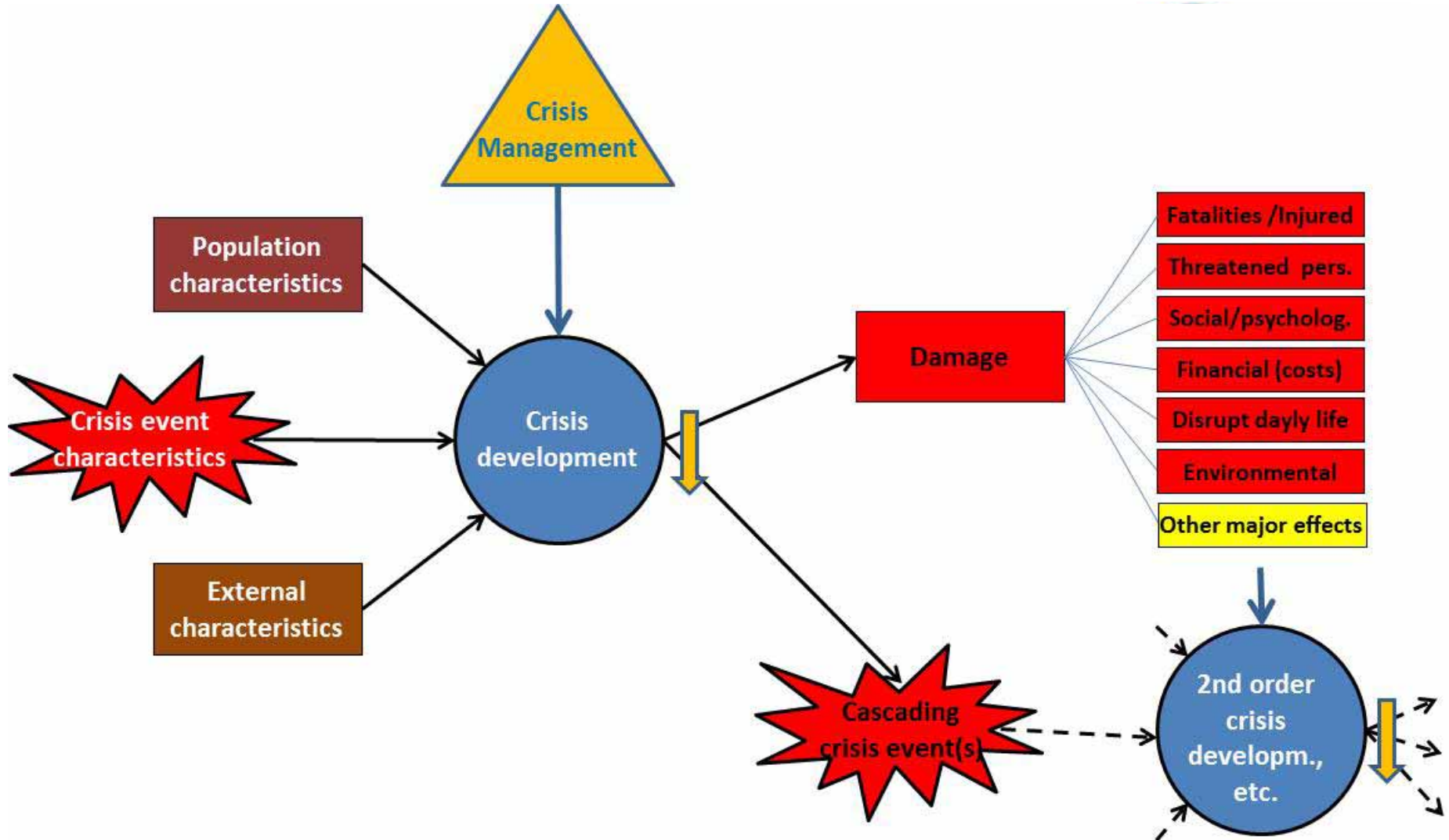
- Technical issues  
(e.g. Communication-/C2-systems, PPE, Social media apps, ...)
- Non-technical issues  
(e.g. Organisational aspects, Procedures for co-operation, Volunteer management, Training, ...)

⇒ WP6, Roadmap

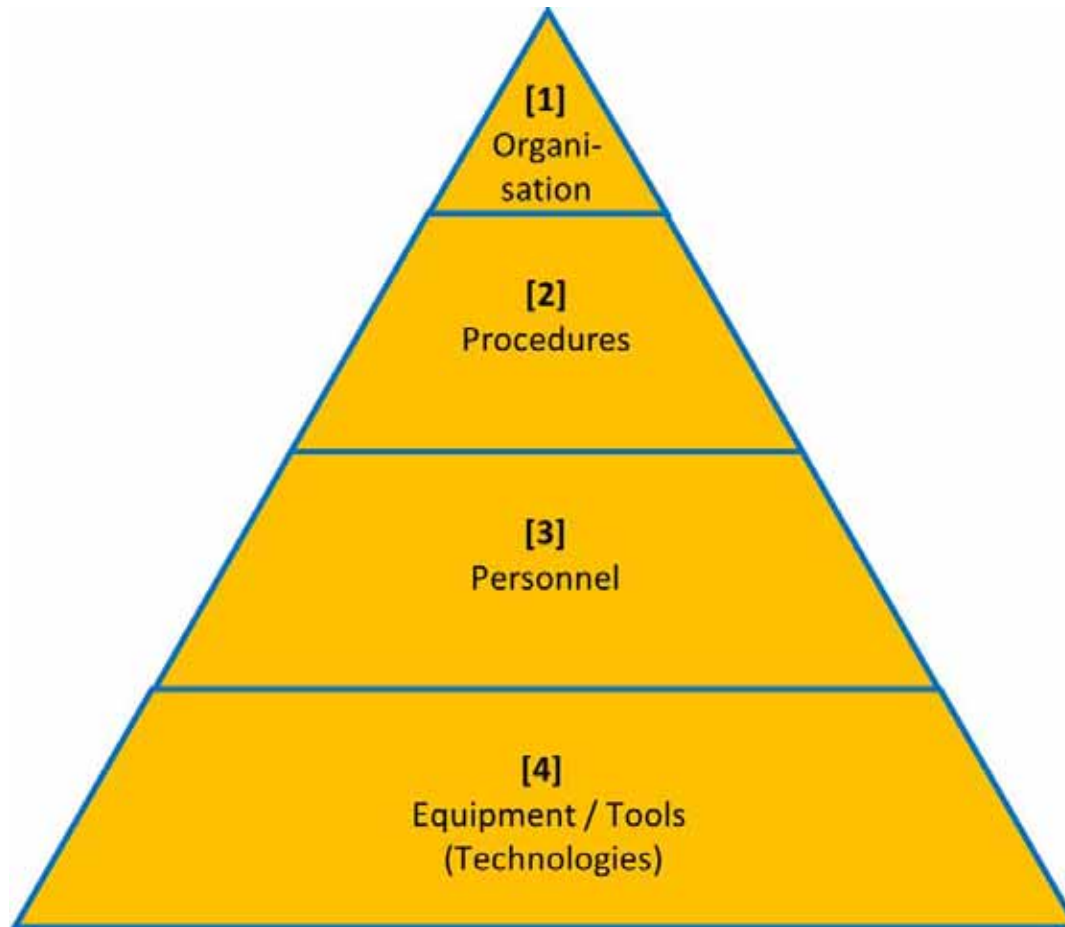
# Conceptual model – Crisis



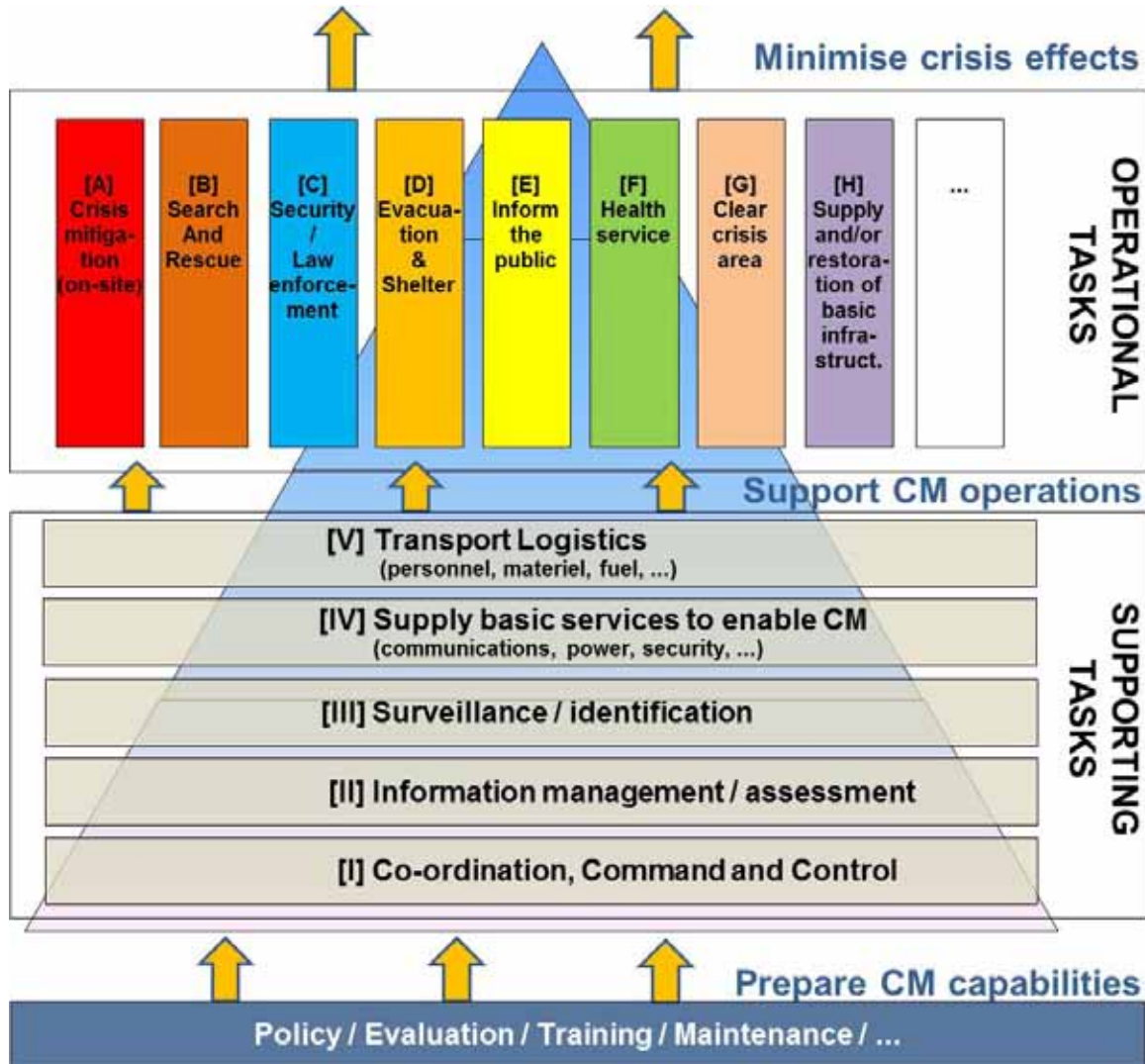
# Conceptual model – Crisis Management



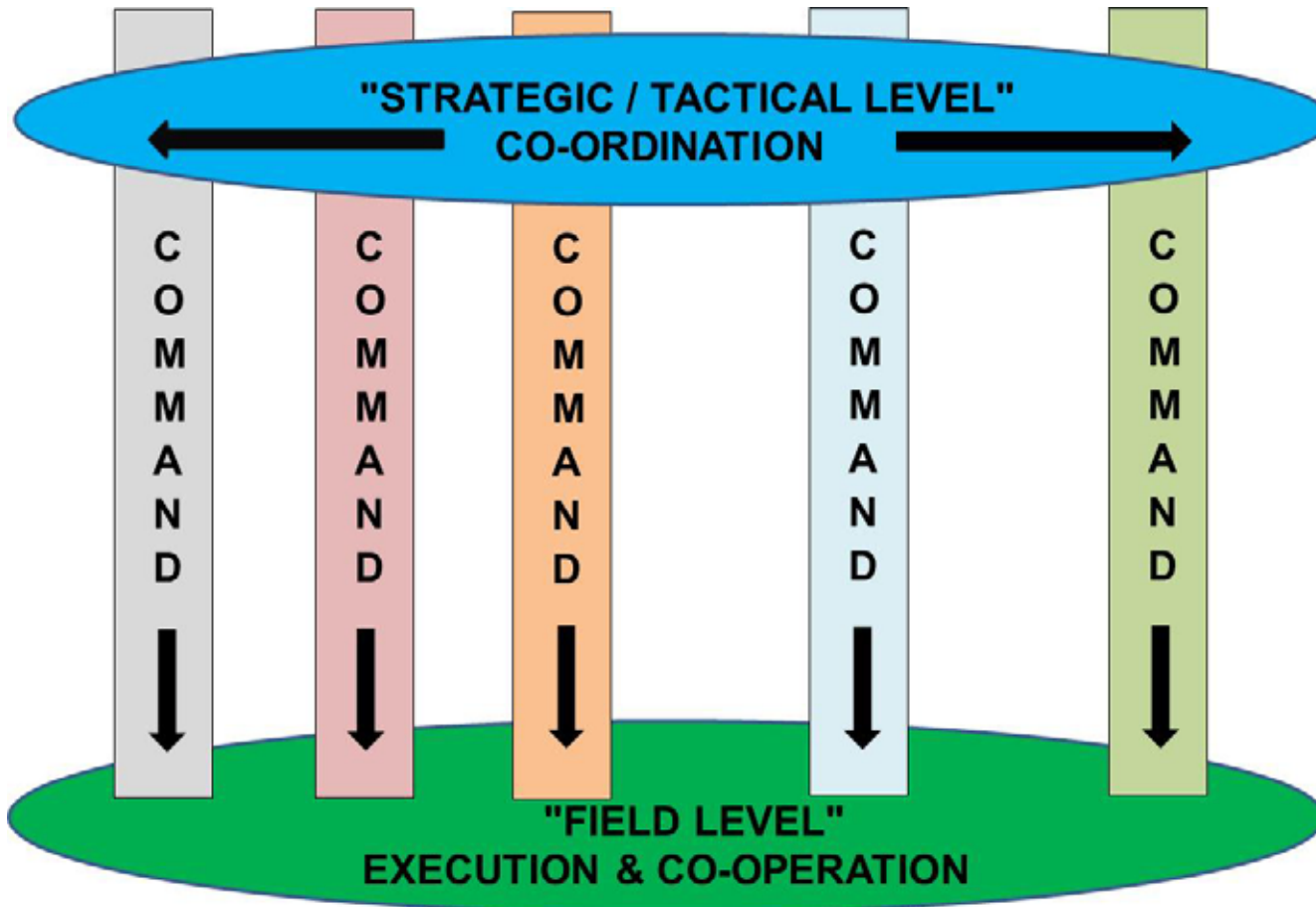
# Conceptual model – CM Elements



# Conceptual model – CM Tasks



# Conceptual model – Co-ordination / Command





# Conceptual model – Description of gaps



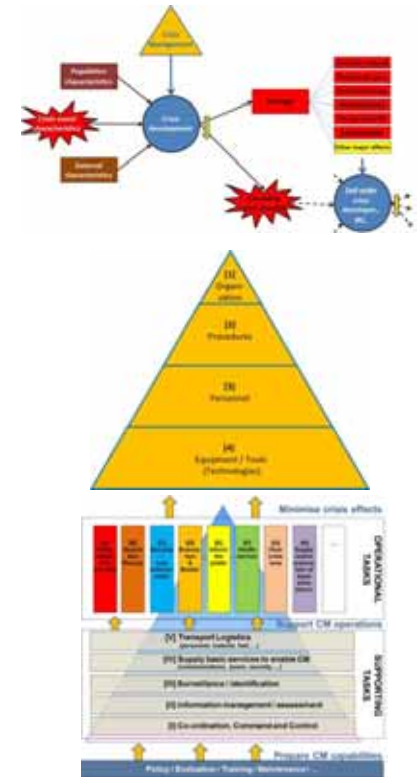
Each CM gap should be described in terms of:

## 1. Severity w.r.t. possible

- Damage
- Cascading events

## 2. Organisational, Procedural, Personnel and/or Equipment (technical) shortcomings

## 3. Operational and/or supporting task(s) it concerns, c.q. preparation tasks





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# Questions / Remarks



Any suggestion w.r.t. solving gaps, contact:

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