

# 2<sup>nd</sup> Workshop of FP7 project ACRIMAS

(Aftermath Crisis Management System-of-systems Demonstration, Phase I)

## Current Gaps & Needs in Crisis Management in Europe



### Project overview



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*Hotel Amabilis, Prague, Czech Republic, 07 Sep 2011*

*09.30 – 17 hrs*

# What is ACRIMAS about?



## Aim of the European Commission (EC-DG ENTR):

- **To call for a large demonstration project (Phase II, funding > 20 M€) in EU security R&D on aftermath crisis management in mid 2012**
  - **Response to & recovery from large-scale disasters (man-made or natural) inside & outside Europe**

## Tasks of ACRIMAS (Phase I):

- **To help to prepare for the call (and the demo project)** by proposing relevant topics to be executed in Phase II, sequenced in a roadmap
- **To raise awareness among the stakeholder community** in crisis management (users, academia, industry, public) about the upcoming Phase II and opportunities for participation
- **To disseminate its findings**

# Phase I projects on aftermath crisis mgt



**ACRIMAS** (*coordinator: Fraunhofer, DE*):

Aftermath Crisis Management System-of-systems Demonstration, Phase I

[www.acrimas.eu](http://www.acrimas.eu)

**CRISYS** (*coordinator: EOS, BE*):

Critical Response in Security and Safety Emergencies

[www.crisys-project.eu](http://www.crisys-project.eu)

**HELP** (*coordinator: UP de Catalunya, ES*):

Enhanced Communications in Emergencies by Creating and Exploiting Synergies in Composite Radio Systems

<http://www.fp7-sec-help.eu/>

# ACRIMAS terms & definitions



## crisis\*:

**incident affecting a society** with the potential to causes loss or damage to persons, property or the environment **which requires extraordinary coordination, resources, and skills in response**

## crisis management\*:

**process** of planning and implementing measures aimed at **preventing, reducing, responding and recovering from a crisis**

## disaster\*:

situation where [...] losses have occurred which **exceeded the ability of the affected organization, community or society to cope** using its own resources

## (disaster) response & recovery\*:

**measures taken during or immediately after a disaster** to meet the immediate needs of the affected and minimising the impact on the incident & activities designed **to return conditions to an equivalent level acceptable to society**

*\* cf. ISO TC 22300 "Societal security"*

## "aftermath crisis management":

**the response to & recovery from large-scale disasters (man-made or natural) inside and outside Europe**

# ACRIMAS “all-hazard view”

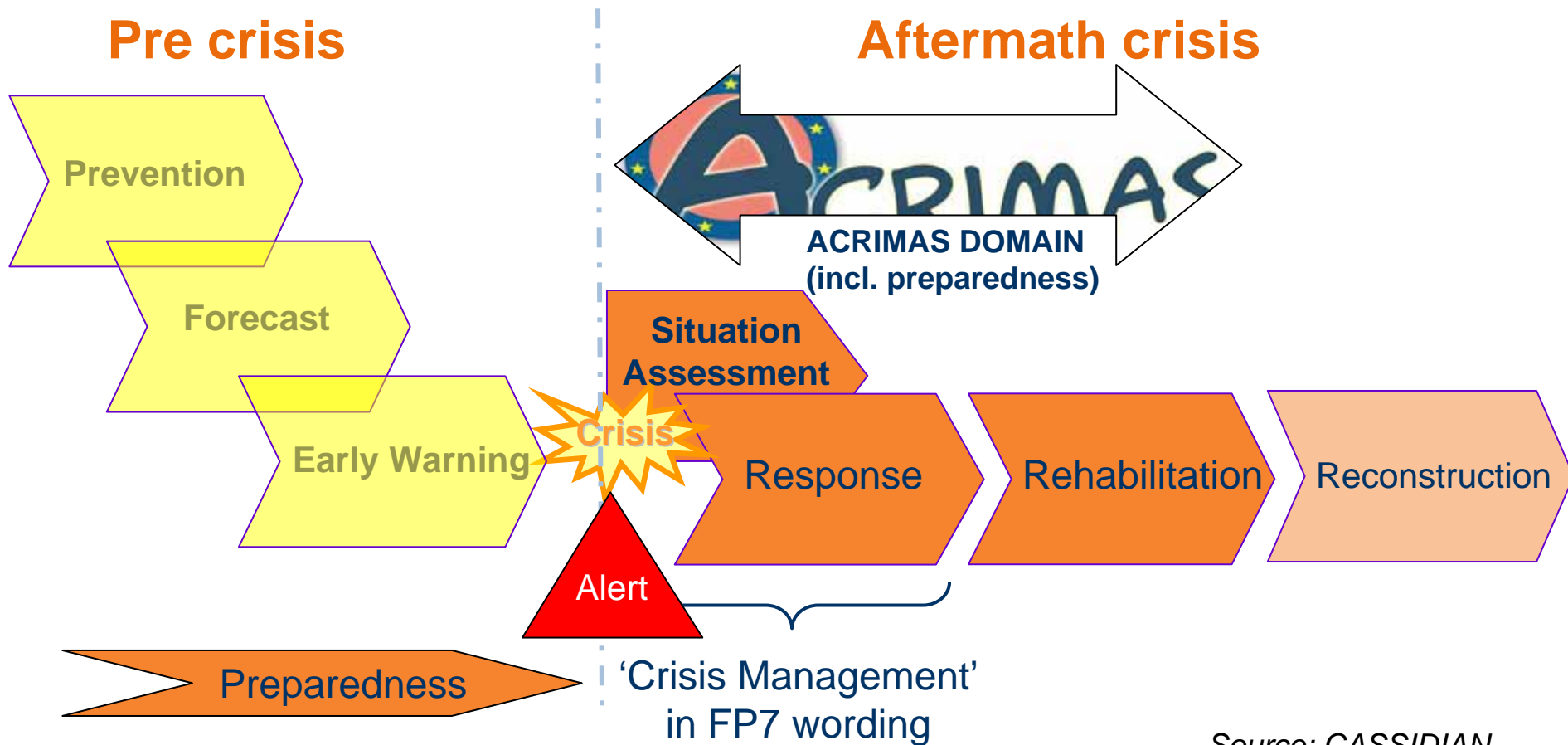


**external ,interventions‘,  
incl. humanitarian crises**

**intentional incidents**



# ACRIMAS domain ("aftermath crisis management")



Source: CASSIDIAN

# ACRIMAS objectives at a glance



**Aim:** To prepare the subsequent Demonstration Project on Aftermath CM

## Objectives:

- i. Identifying current and future **missions and challenges in large scale disasters** for European CM **inside and outside Europe**,
- ii. **Identifying weaknesses or vulnerabilities in the current 'CM System' in Europe**, corresponding development needs, & relevant projects,
- iii. Identifying and mapping **current and upcoming approaches or solutions in relevant areas** (policy, legal, technology, standards etc.) for identified needs,
- iv. Identifying **central CM topics** and assessing which of them should be demonstrated in the Phase II Demo Programme and which need further R&D,
- v. Providing guidance for the planning, execution, evaluation and exploitation of a demonstration programme (i.e. elaborating a **demonstration concept**),
- vi. Ensure wide **awareness and dissemination** of these preparations among the relevant stakeholders (supply & user side),
- vii. Indicate cooperation with **non-EU country participants**.

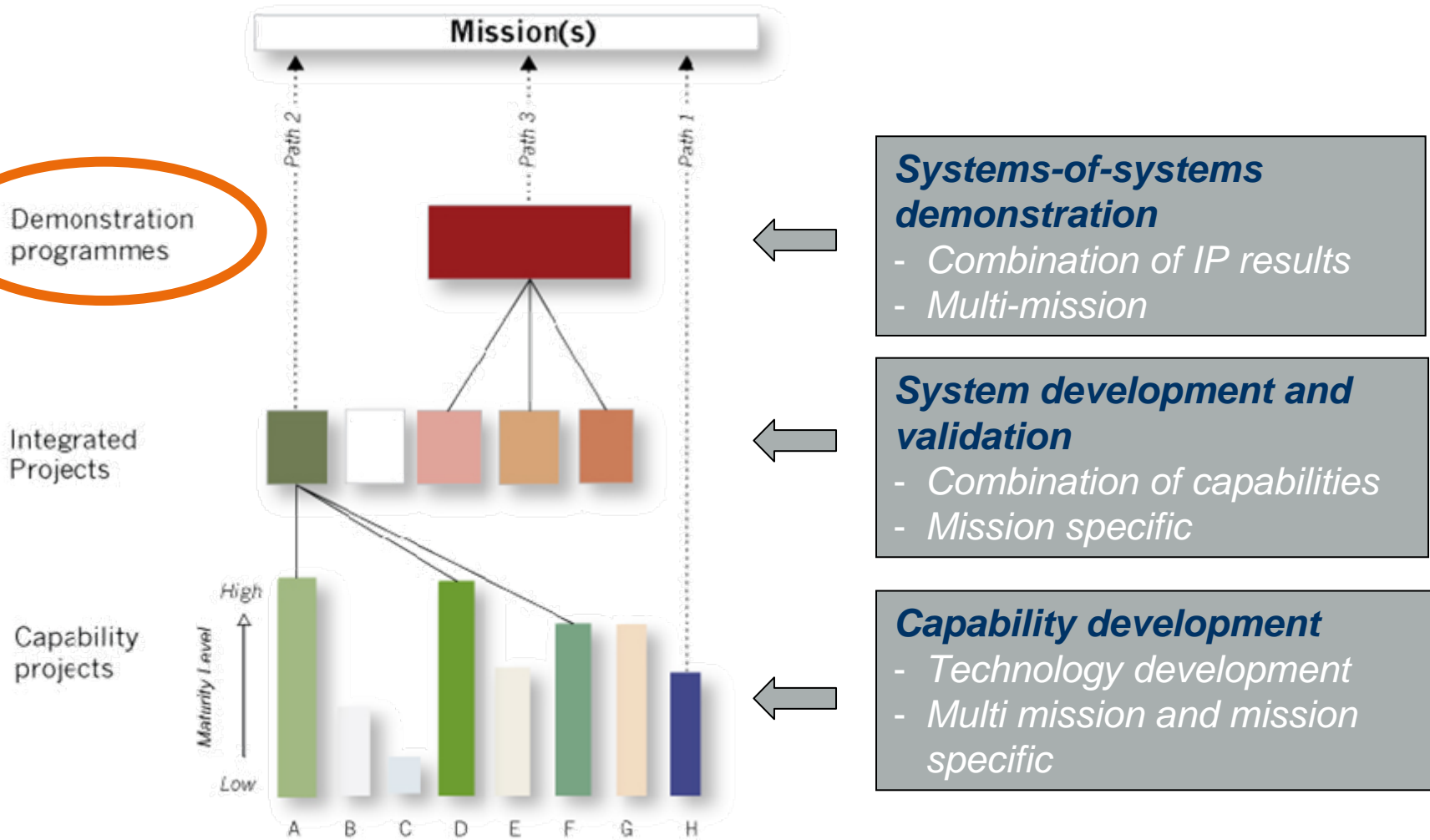
# ACRIMAS expected main results



1. Deliver the **roadmap** of what to do in the Phase II Demonstration Programme (in terms of sequenced demonstration & experimentation topics), including further R&D needs
2. Elaborate the **demonstration concept**
3. Assure EU wide **awareness and dissemination** of the preparation of the Phase II Demonstration Programme



# Building blocks of EC security theme



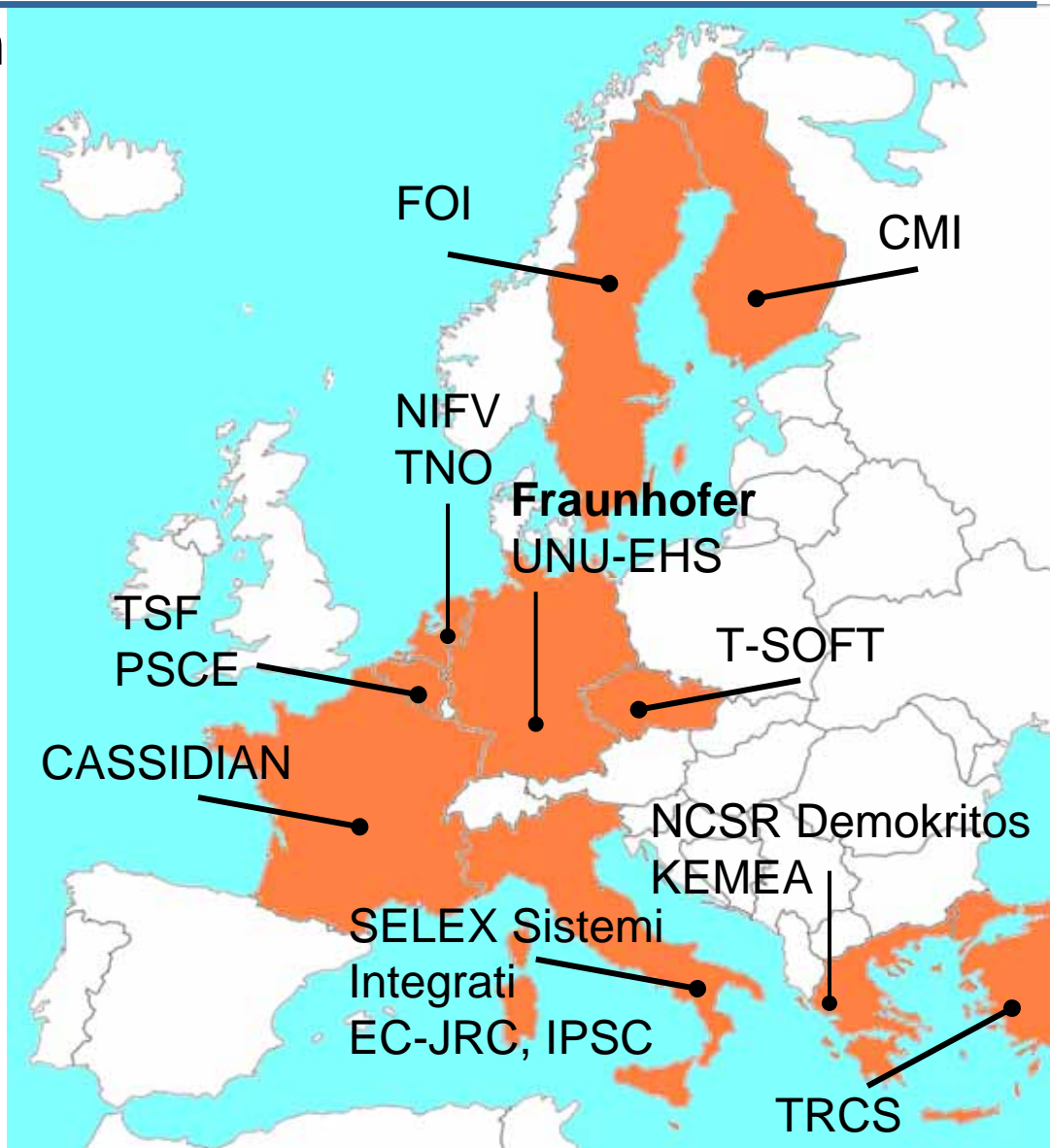
# What is a demonstration programme?



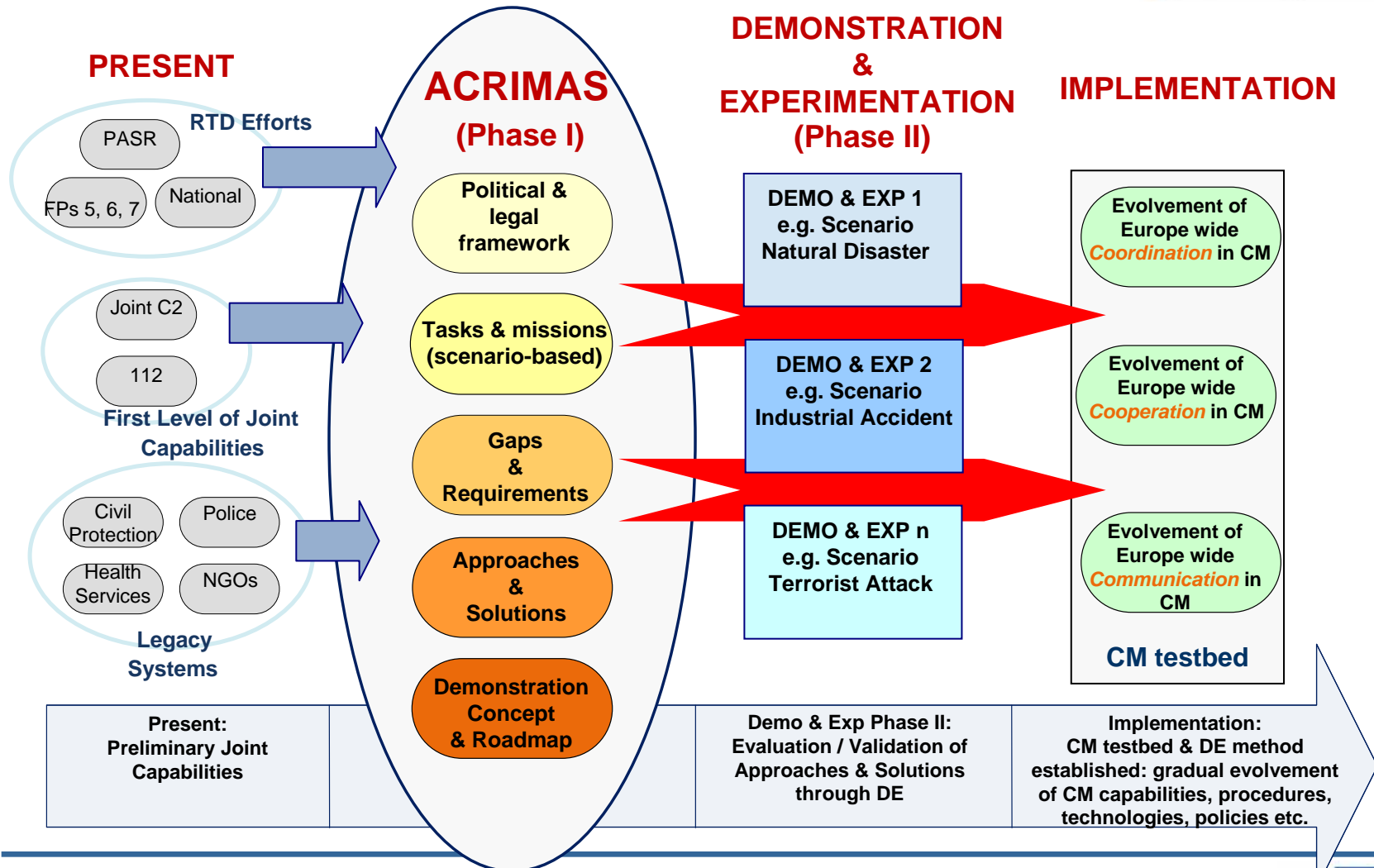
- **Top complexity level (system-of-systems) in FP7 project hierarchy**
- **This means it should do research with:**
  - Real environments, realistic scenarios, people-in-the-loop, legacy systems integrated
- **It aims at:**
  - **Gaining knowledge** on phenomena and constraints that emerge in such realistic settings
  - **Gaining knowledge** on how to implement new solutions – combining systems, procedures, organisation and people
- **A key instrument to do this is *experiments*.**
  - Put a new solution into context, and test how it works
  - **Is not just an exercise**, because training is not the key goal. A failed experiment is a success – a failed exercise is not!
- **Therefore, a demonstration programme should:**
  - **Use previously developed solutions** (systems, doctrine, knowledge...), that have a quite high degree of maturity
  - Possibly put some effort into finalizing some **enabling solutions**
  - Develop **infrastructure** for system-of-systems experiments
  - Prepare, carry out and evaluate **experiments**

# ACRIMAS consortium

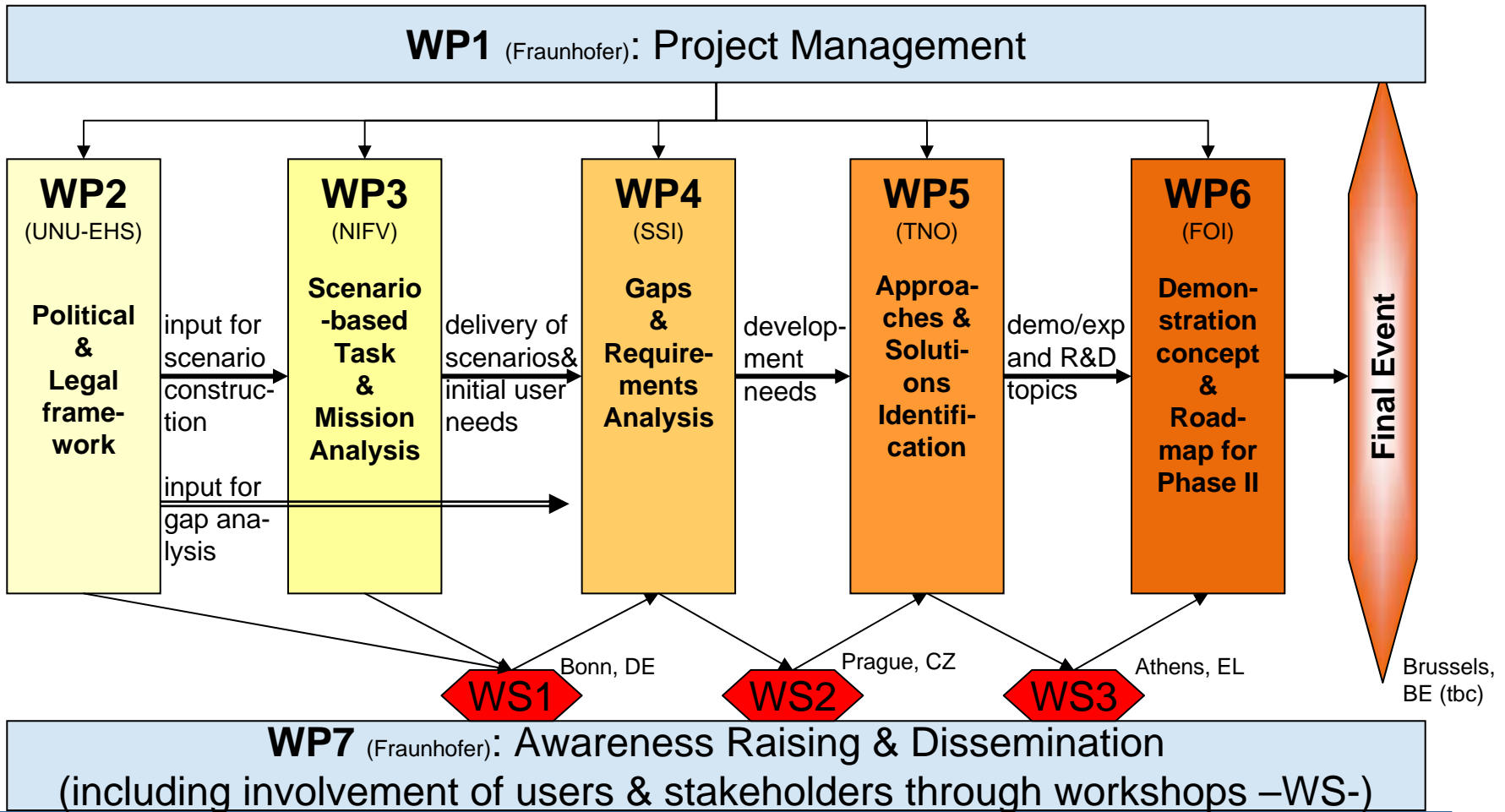
- 15 partners
- 9 EU MS plus Turkey
- Budget ~ 1.1 M€
- Duration 15 months
- project start: 1st Feb 2011
- Partners include:
  - 4 RTOs
  - 4 Users\*
  - 2 Industries
  - 1 SME
  - 3 NGOs, Think Tanks\*
  - 1 EC & 1 UN org.



# Scope & vision of ACRIMAS



# ACRIMAS work plan

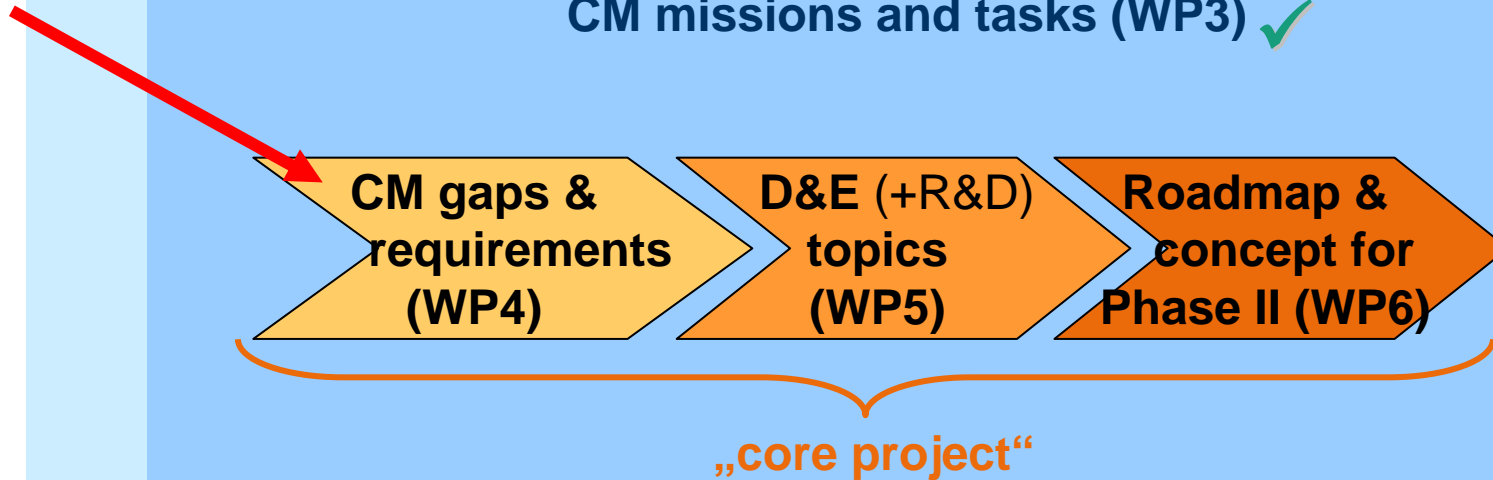


# Work packages in context



Political & legal framework of CM (incl. societal aspects) (WP2) ✓

CM missions and tasks (WP3) ✓



CM: crisis management

D&E: demonstration & experimentation

R&D: research & development



# ACRIMAS (likely) thematic areas for D&E activities

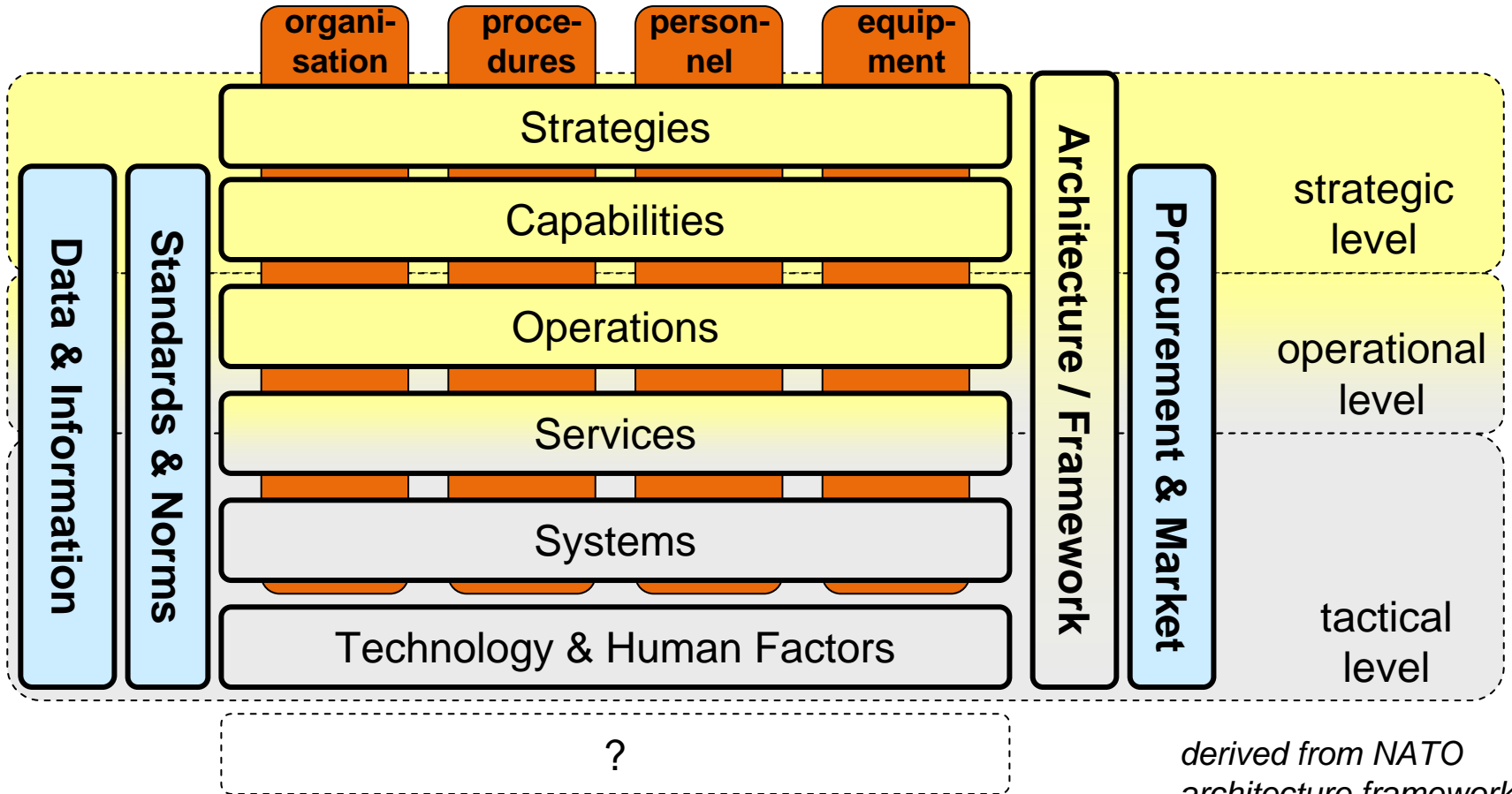
## Expected results:

1. The **demonstration concept** for Phase II
  2. The **roadmap** containing and sequencing the selected topics for demonstration & experimentation in Phase, including further R&D needs
1. Planning, tasking, monitoring, and legislative frameworks
  2. Situation awareness
  3. Decision support
  4. Deployment of resources
  5. Communications
  6. Training tools & methods
  7. Systems & procedures for restoration of basic services & infrastructures
  8. Media involvement in crisis situations
  9. European coordination for humanitarian operations

# ACRIMAS dimensions

## Other aspects:

- global dimension („EU external“)
- EU dimension („added value“)
- MS dimension (cross-border)
- the public



# Work done



## Analysis of the political & legal framework of CM in Europe:

- **EU level** (EC/MIC, Council/CCA, EEAS/CSDP)
  - Including relation to and role of **UN & NATO** (EADRCC)
- Member State (MS) level (four exemplary case studies: **DE, IT, SE, EL**)
- **Societal aspects** (demographic change, role of stakeholders, ...)

## Analysis of relevant scenarios and related missions & tasks of CM in Europe:

Natural disasters				Major technical incidents						Terrorism & Crime			External interv		Other																				
Geophysical		Meteorological/Climatological		Hydrological	Biological	Industrial accidents		Miscellaneous			Transport			Complex emergencies																					
Earthquake	Vulcano	Mass movement (dry)	Storm	Extreme temperature	Drought	Wildfire	Extreme rainfall	Flood	Mass movement (wet)	Epidemic	Insect infestation	Animal stampede	Chemical incident with combustible or explosive materials - E	Chemical incident with toxic materials - C	Nuclear incident - R/N	Poisoning	Tunnel or mining incident	Large building fire	Collapse of buildings	Critical infrastructure failure: drinking water, food supply, sanitation	Critical infrastructure failure: energy, telecom, ICT	Critical infrastructure failure: transport	Air crash	Accident on water	Rail accident	Traffic accident	Terrorist action - CBRN	Terrorist action - E	Cyber attack / cyber crime	Organised crime	Welfare	Civil disturbance	Large-scale movements of people	Incident abroad with EU citizens	Economic failure

- All-hazard view
- Scenarios & CM missions and tasks; capabilities & tasks and service providers; scenarios & incident characteristics

# Share your views with us!



[www.acrimas.eu](http://www.acrimas.eu)



ACRIMAS 1st workshop, 30 June 2011, Bonn, Germany

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