

DRIVER+ TAXONOMY OF CRISIS MANAGEMENT FUNCTIONS

A TOOL FOR COMPREHENSIVE EXPLORATION OF REQUIREMENTS
AND SOLUTIONS

EVENT

“Interagency Interaction in Crisis Management and Disaster Response”

Annual conference of the Crisis Management and Disaster Response Centre of Excellence

5-6 June 2018, Sofia, Bulgaria

CSDM

Centre for Security and Defence Management, <https://it4sec.org/csdm>

Institute of ICT, Bulgarian Academy of Sciences

Contacts: tagarev@bas.bg; ratchevv@bas.bg


Taxonomy, functional design of the online platform, gaps analysis, analysis and adaptation of CM solutions, ...

OUTLINE


About the Driver+ project

Taxonomy of Crisis Management Functions

Possible implementation for comprehensive exploration of CM requirements and solutions



DRIVER+ will seek to improve the way **capability development** and **innovation management** are tackled, by **testing** and **validating** (in realistic environments) **solutions** that are addressing the operational needs of practitioners dealing with Crisis Management.



FROM DRIVER TO DRIVER+

WHAT HAS BEEN IMPROVED?

1

A REVISED AND SIMPLIFIED
PROJECT STRUCTURE



Turning objectives into
tangible results

2

A NEW LEADERSHIP AND
CONSORTIUM MEMBERS



Reinforcing the project
team

3

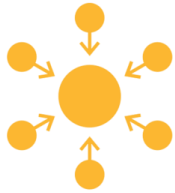
AN OPEN AND INCLUSIVE
APPROACH



Enhanced involvement of
external stakeholders

A PRACTITIONER-DRIVEN APPROACH

FROM SOLUTION-DRIVEN TO NEEDS-DRIVEN



In order to provide a European answer to the challenges Crisis Management is facing today and tomorrow, the involvement of as many concerned stakeholders as possible is essential.

The selection of solutions to be tested within DRIVER+, should be provided by current partners and external organisations to extend the knowledge base. The process should be neutral and transparent, and both the review and selection should be driven by the end-users.



THE OBJECTIVES



To develop a **pan-European Test-bed** for Crisis Management capability development



To develop a comprehensive **Portfolio of Crisis Management Solutions**



To facilitate a shared understanding in Crisis Management across Europe



OBJECTIVE 1: TO DEVELOP A PAN-EUROPEAN TEST-BED FOR CM CAPABILITY DEVELOPMENT

AN ARENA OF VIRTUALLY CONNECTED FACILITIES AND CRISIS LABS

1.

Providing a pragmatic **step-by-step guidance** to conduct trials

2.

Providing a **reference implementation** for all DRIVER+ trials

3.

Providing **general guidance and the technical infrastructure** of the Test-bed to support the trials

4.

Creating a **demonstration infrastructure where stakeholders can collaborate in trialling and evaluating** new tools, processes or organisational solutions



OBJECTIVE 2: TO DEVELOP A PORTFOLIO OF CRISIS MANAGEMENT SOLUTIONS

A DATABASE-DRIVEN ONLINE CATALOGUE

1.

Documenting and **presenting details on solutions** tested and evaluated during the DRIVER+ Trials

2.

Allowing for the introduction of **third party solutions** already used by practitioners or relevant to Crisis Management

3.

Supporting the **sharing of user experiences**, and thereby, easing the successful implementation and usage of solutions for other practitioners



OBJECTIVE 3: TO FACILITATE A SHARED UNDERSTANDING IN CRISIS MANAGEMENT

ENHANCING THE COOPERATION FRAMEWORK

1.

Building and structuring a dedicated **Community of Practice in Crisis Management** to facilitate identification of best practises and sharing of lessons learnt

2.

Cooperating with **CM experts, practitioners and solution providers** external to DRIVER+

3.

Organising **I4CM events (Innovation for Crisis Management)** that bring together solution providers practitioners at local/regional level and relay the Community of Users on European level

4.

Developing new standards and/or contributing to ongoing and future **standard development**

5.

Organising **3 Policy-Research Roundtables** to exchange with policy-makers on project results and potential EU policy implications

HOW WILL WE REACH THE OBJECTIVES?



To develop a **pan-European Test-bed** for Crisis Management capability development



TRIALS

Poland, France, Austria,
The Netherlands



FINAL DEMO

Poland/Italy



To develop a comprehensive **Portfolio of Crisis Management Solutions**



To facilitate a **shared understanding** in Crisis Management across Europe





TRIALS

4 EVENTS TO OPERATIONALISE AND TEST
BOTH THE SOLUTIONS AND THE TEST-BED COMPONENTS

Poland, France, Austria, The Netherlands



Based on updated Crisis Management gaps and practitioner needs



Benefiting from the DRIVER+ Test-bed components



Testing the potential benefits of DRIVER+ Solutions and Test-bed at EU-level



All results to be made available in the Portfolio of Solutions



FINAL DEMONSTRATION

1 EVENT TO SHOWCASE THE SOLUTIONS, THEIR EFFICIENCY AND EU ADDED-VALUE
Italy and Poland

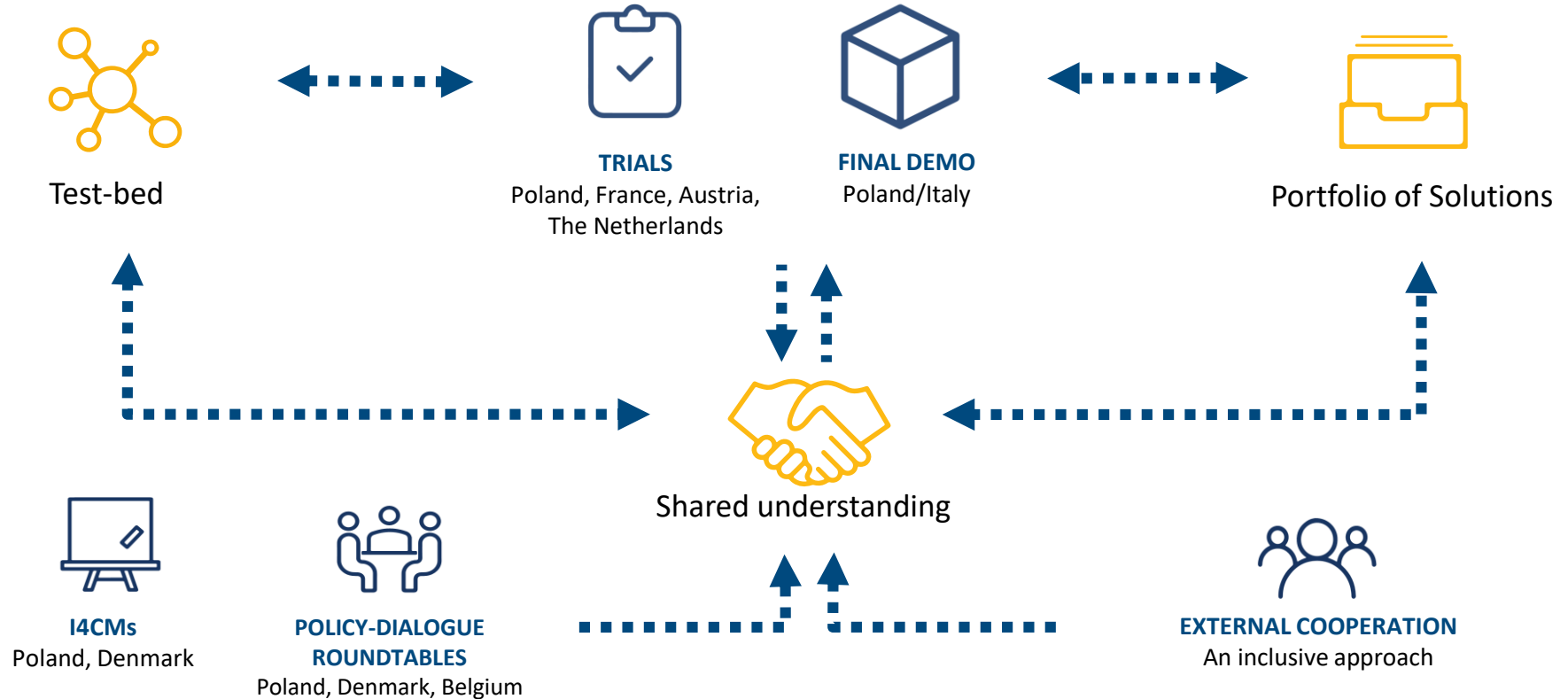


Building upon the results of the Trials and the lessons learnt from reference implementations and design validation of the Test-bed



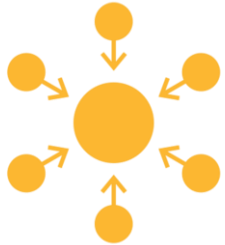
Showcasing the benefits that DRIVER+ Solutions and Test-bed may represent at the EU-level and for the Emergency Response Coordination Centre (ERCC) activities in particular

HOW WILL WE INCREASE THE IMPACT?



PARTICIPATION OF PRACTITIONERS AND SOLUTION PROVIDERS

HOW?



- To identify and update **needs and gaps** in Crisis Management
- To develop **scenarios** as a basis for the DRIVER+ trials
- To integrate **solutions** for the trials
- To prepare and conduct the **trials**
- To **evaluate** the solutions and derive **lessons learnt**
- To participate in **workshops, conferences** and dialogue **roundtables**
- To join the **Online Community Platform** to exchange on best practices, future trends etc.
- To prepare **reference documents, guidelines and standards**

THE TIMELINE



January 2018

Gaps & Needs assessment workshop



February 2018

Trials workshop 0 (Poland)

September 2018

I4CM#3 + Standardisation needs identification workshop (Poland)



June 2019

I4CM#4 (Denmark)



November 2019

Final Demo (Italy/Poland)



February 2020

Final Conference (Belgium)

2018

2019

2020

May 2018

Trial #1 (Poland)



October 2018

Trial #2 (France)



May 2019

Trial #3 (The Netherlands)



September 2019

Trial #4 (Austria)

June 2018

1st Policy-Research Dialogue Roundtable (Poland)



December 2018

2nd Policy-Research Dialogue Roundtable (Denmark)



February 2020

3rd Policy-Research Dialogue Roundtable (Belgium)

TRIAL 3 'CALL FOR SOLUTIONS'

Scenario: A dyke or sluice breach; more than 500.000 people threatened by flooding; water level about 1 meter

- Cascading effects: Flooded roads and railways; Partly power outage; (Tele-)communications failure; Shortage in fresh drinking water and food supply for the population within and outside of the affected area.

Looking for solutions addressing the following capability needs:

- Planning of resources (qualified personnel and equipment) for response during large scale and long-term crises
- Capability to exchange crisis-related information among agencies and organisations on various level (interoperability)
- Planning and managing large scale evacuation of population in urban areas

Deadline: 2 July 2018

Further information: <http://www.driver-project.eu/collaborate-with-us/call-for-applications-2/call-for-application-trial-the-netherlands/>

Atos

TNO

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GIPBT

THALES

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INTERNATIONAL MANAGEMENT SERVICES

E S
EUROPEAN ORGANISATION FOR SECURITY

DLR

DANISH RED CROSS



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Public Safety Communication Europe

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WESTFÄLISCHE WILHELMS-UNIVERSITÄT MÜNSTER

SDM
IIMCO

VALABRE
ANTICIPER VOTRE PRÉSENT

Den Haag

ARMINES

MAGEN DAVID ADOM IN ISRAEL
מגן דוד אדום בישראל

gmv
INNOVATING SOLUTIONS

SISEKAITSEAKADEEMIA
ESTONIAN ACADEMY OF SECURITY SCIENCES

Disaster Waste Recovery

CITET

CONTACT

REACH US



@DRIVER_project



Groups:
DRIVER Project



DRIVER Project

More information about the project - coordination@projectdriver.eu
Interested in collaborating with us? - cooperation@projectdriver.eu
Communication and media contact communication@projectdriver.eu



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PURPOSE OF THE CM TAXONOMY

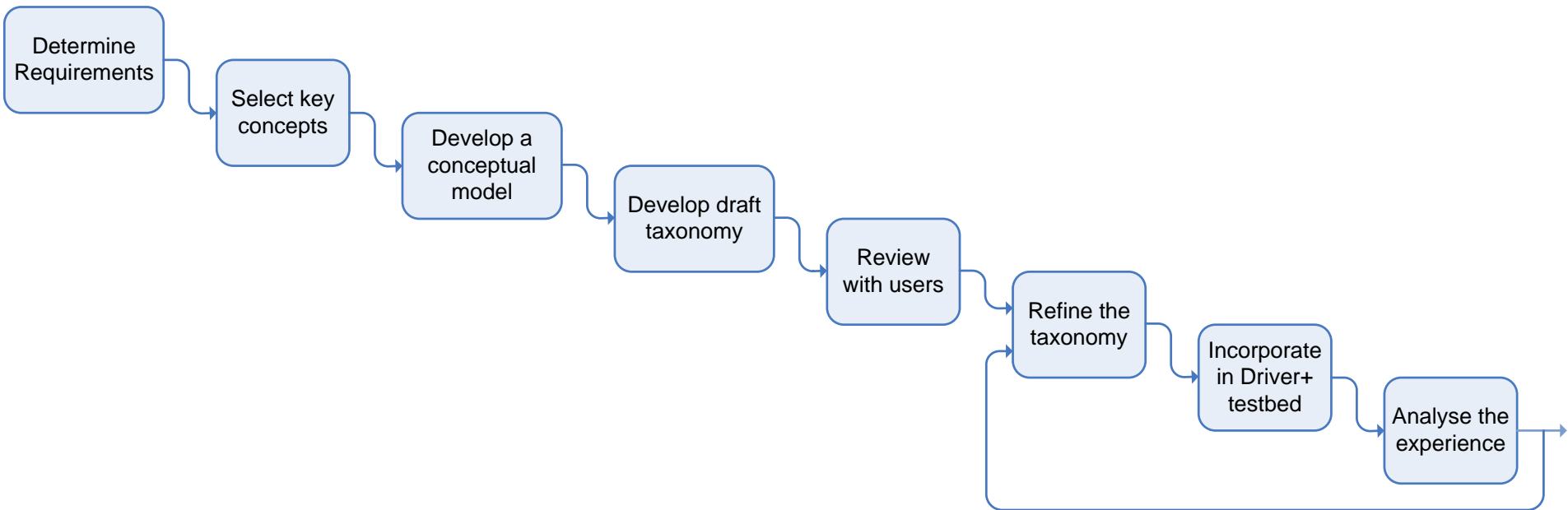
Bridge the community of Crisis Management (CM) practitioners and the developers and providers of solutions

Practically, support the classification of:

- CM needs and gaps
- Trials
- Solutions
- Other related information

and facilitate navigation of the online platform, queries, delivery of prioritised lists of solutions and suggestion of other relevant information

Natural and man-made hazards and related disasters, and communities, critical infrastructure and assets, environment



REQUIREMENTS

Oriented towards practitioners (commonality of language, categorization, ...)

Comprehensiveness

Follow generally accepted management functions (e.g. Planning, Organizing, Staffing, Directing and Controlling)

Internal consistency (parent-child; no gaps)

'Universalism', i.e. widest applicability

Provide for enhanced interoperability (inter-agency, cross-border)

KEY CONCEPTS

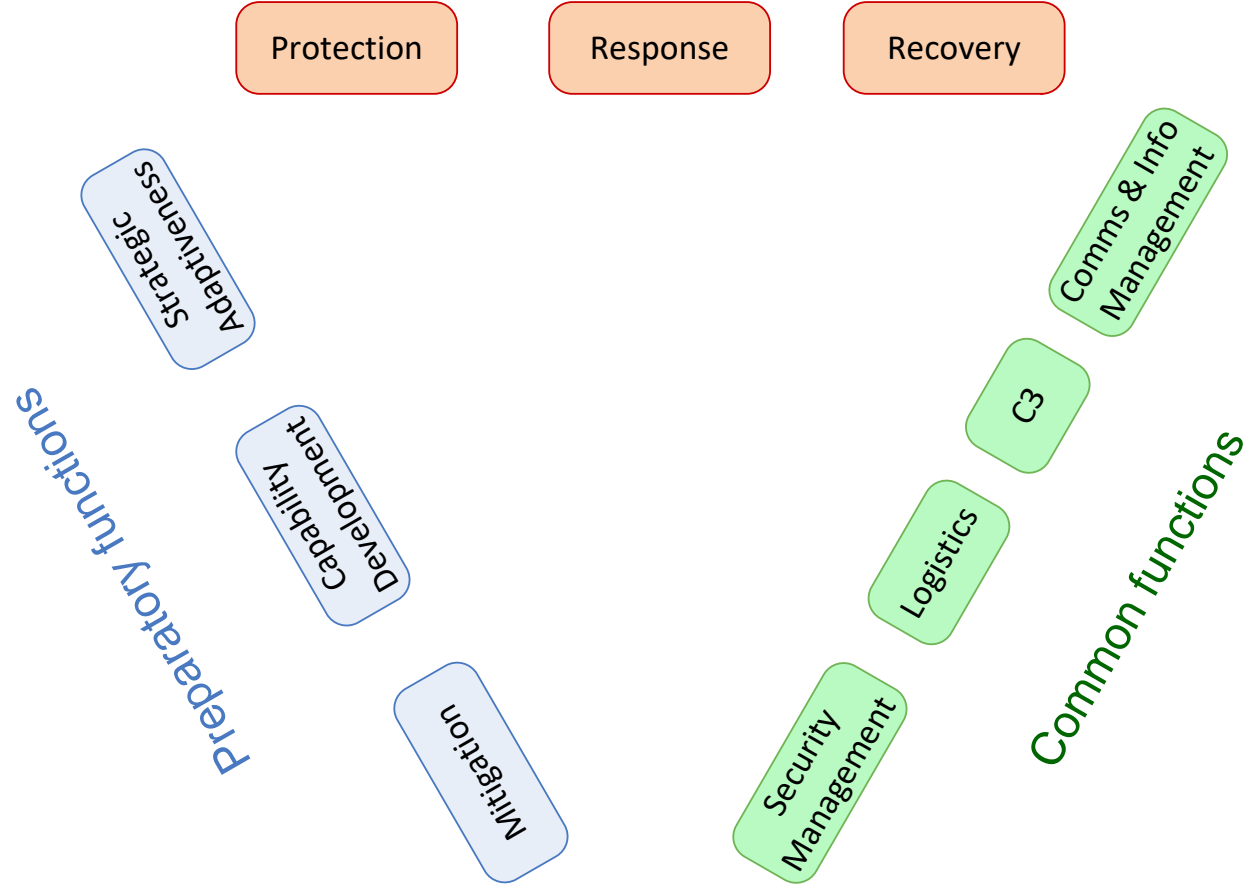
Hazard, vulnerability, risk

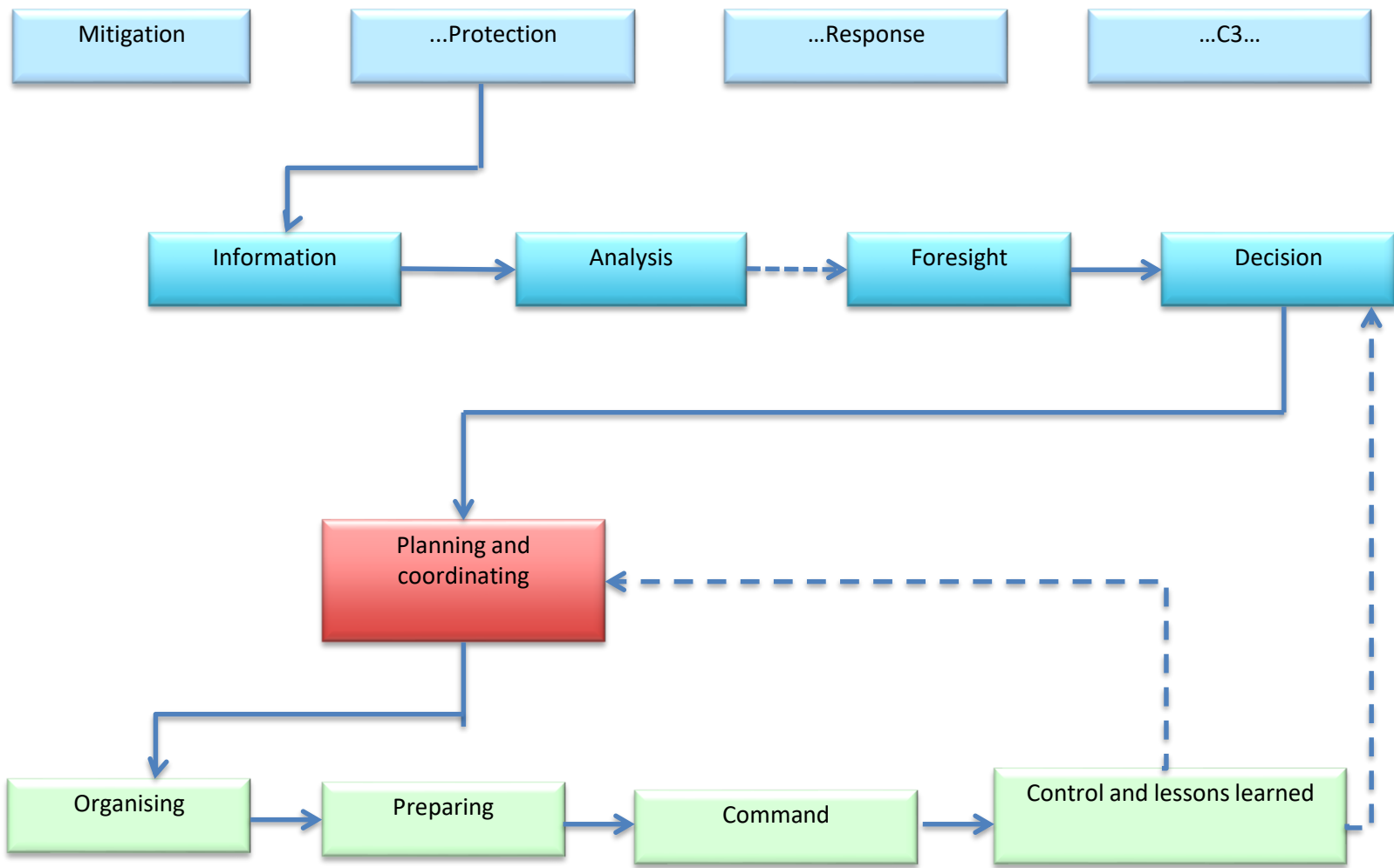
Community

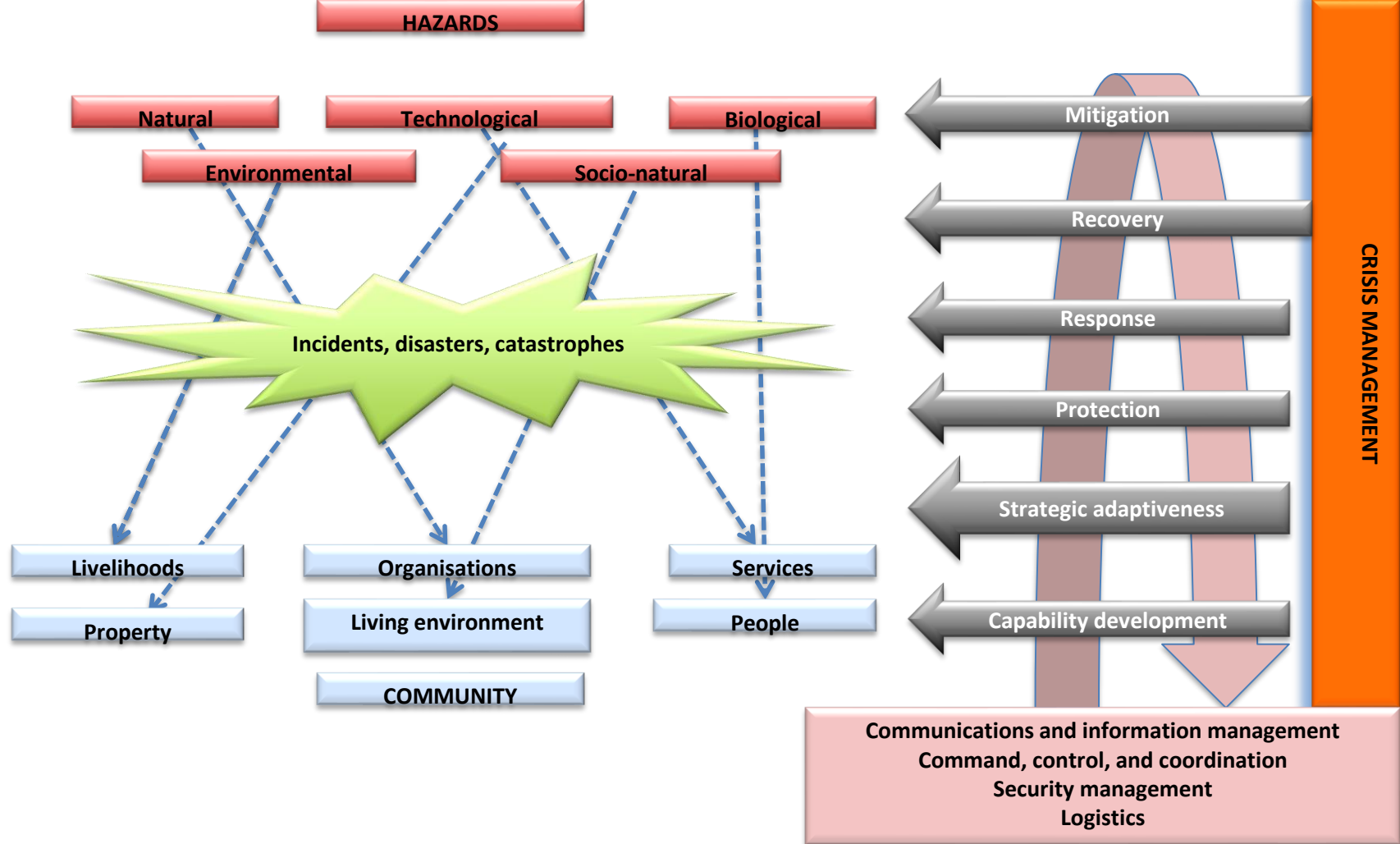
Consequences-based concepts: incident, disaster, catastrophe, and crisis

Management-based concepts: incident, disaster, and crisis management

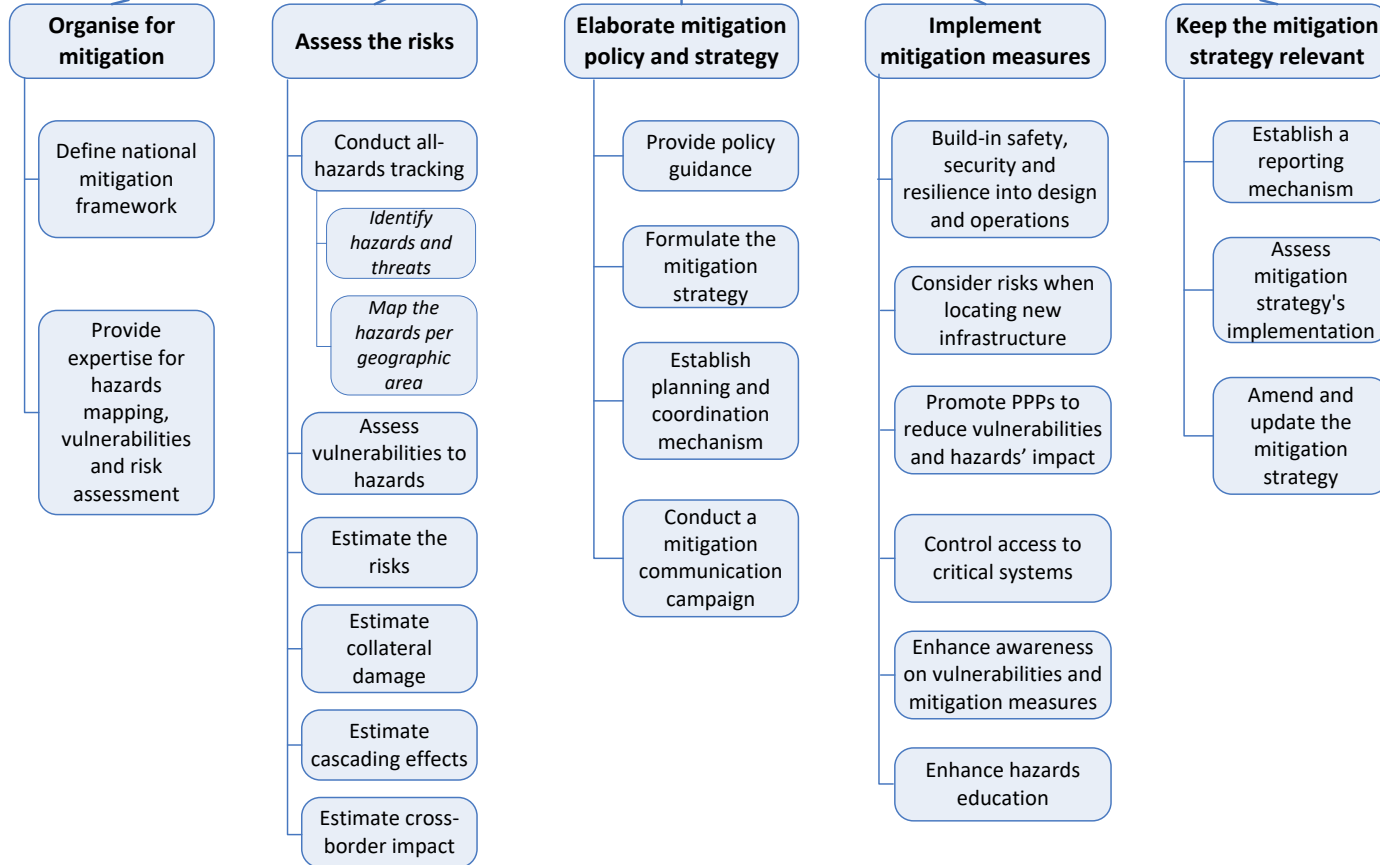
Operational functions







MITIGATION

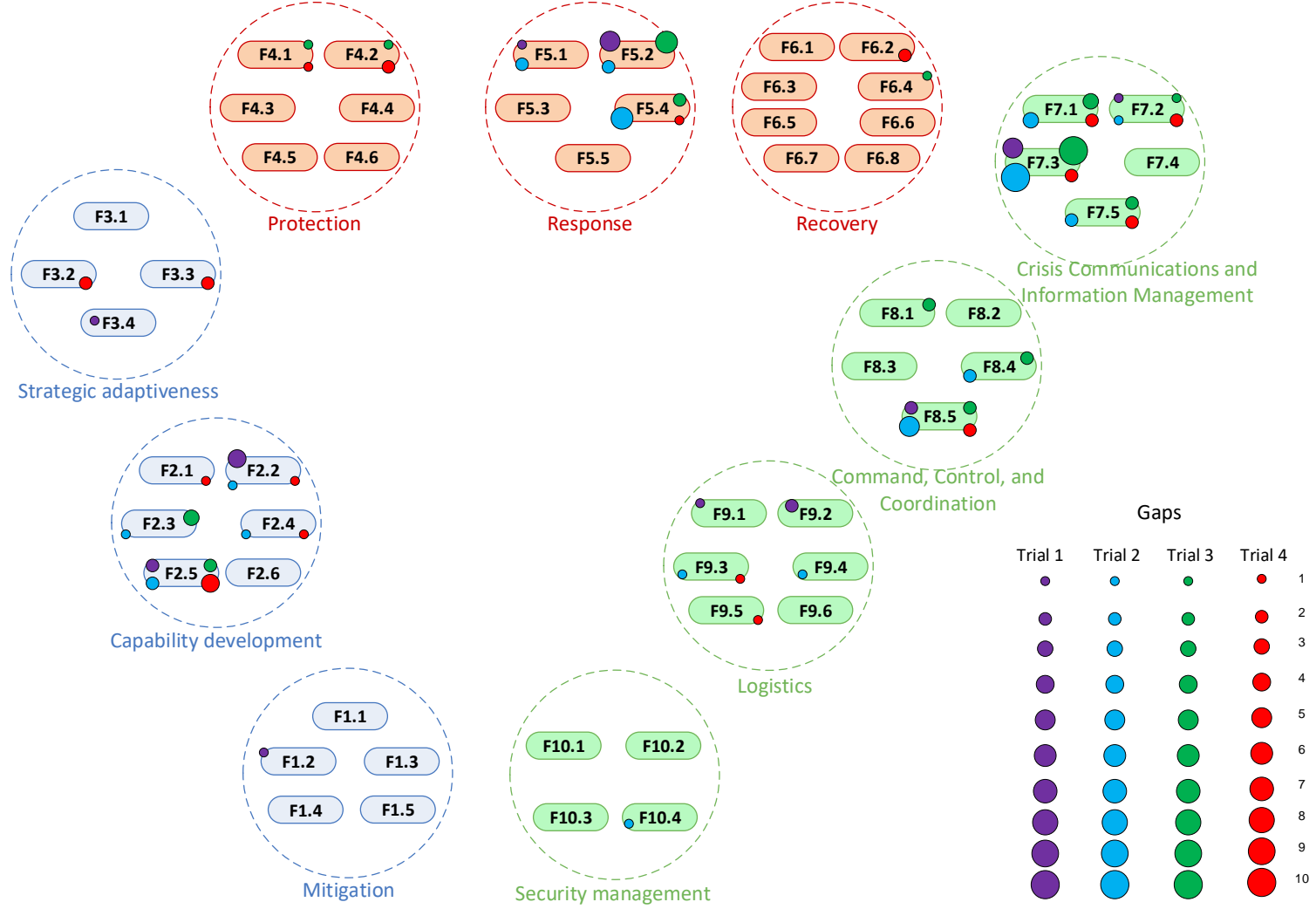


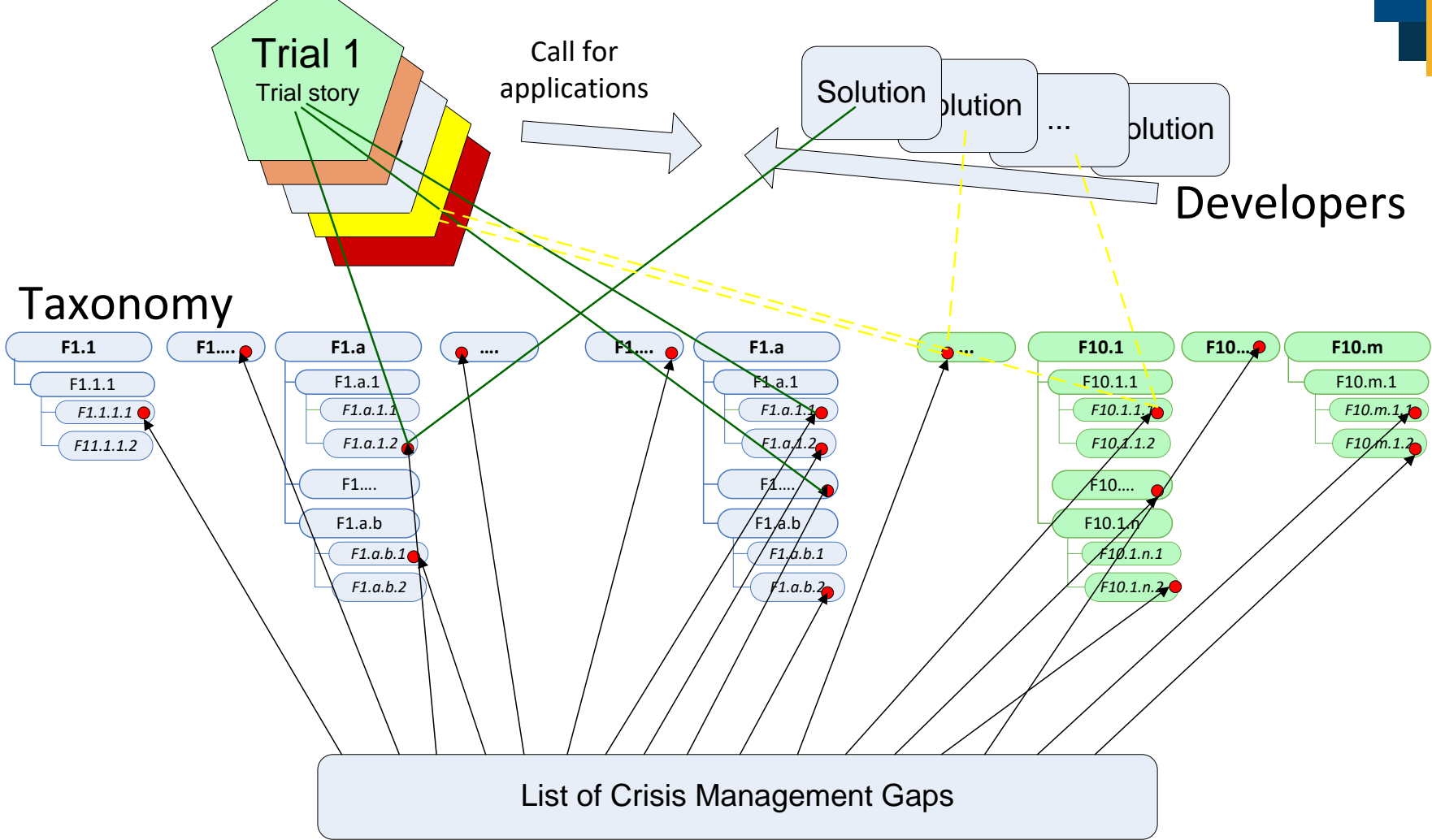
Preparatory functions

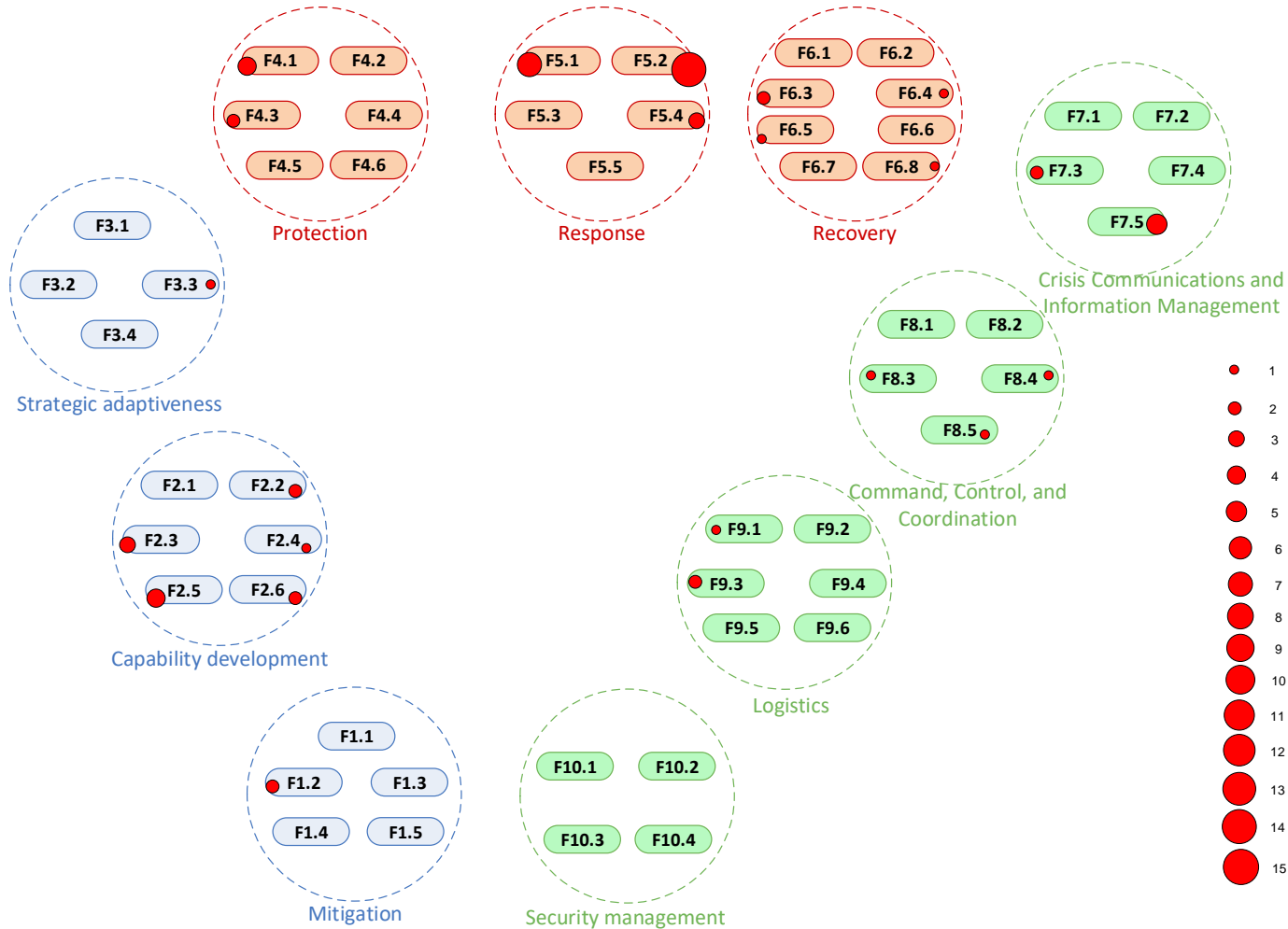
Operational functions

Common functions

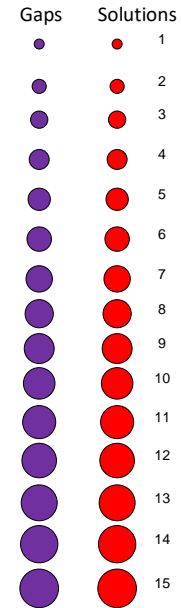
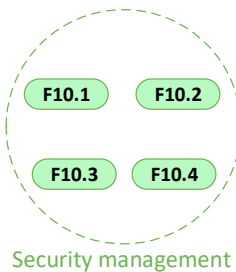
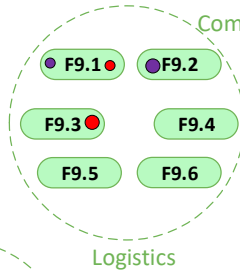
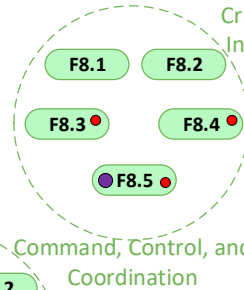
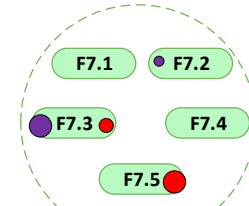
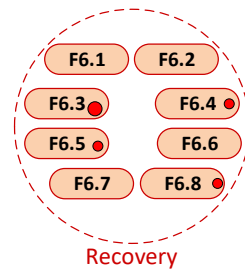
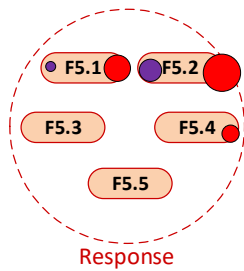
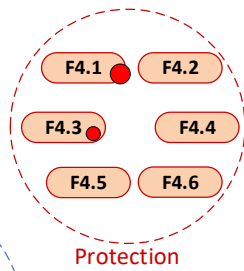
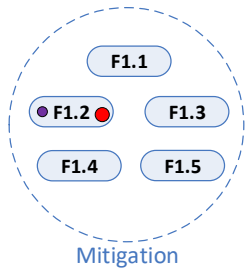
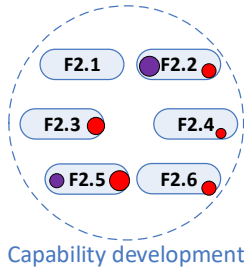
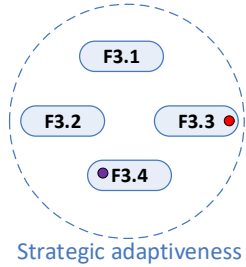
Driver+	Mitigation	Capability Development	Strategic Adaptiveness	Protection	Response	Recovery	Crisis C&I Management	C3	Logistics	Security Management	
UN/ Sendai	Mitigation (understand & reduce risk)	Preparedness	Knowledge; cooperation; Innovation & technology; resilience	Prevention	Response	Recovery and Rehabilitation	Information Management	Coordination	Logistics	Security Management	Humanitarian Development Nexus, Financing
UN/ OCHA	Preparedness & risk management										
EU 1313	Prevention	Preparedness Readiness			Response	Relief		ERCC	Logistical Support		
DHS UTL	Protect	Preparedness Supporting Tehnology		Protect	Respond	Recover	Comms & Info Management		Resource Management	Prevent (access control)	Prevent (Counter-Terrorism; Intel)
CIP EU 114	Risk analysis Measures	Measures		Protection	Graduated response		Communications			Security of info systems; access control	
NIST CyberFr	Identify			Protect Detect	Respond	Recover					
ResiStand	Preparedness Risk assessment Exposure reduction	Capacity Development	Trend analysis Monitoring & Review	Monitoring and Detection	Response	Recovery	Sit Assessment Information Management (in Response)	C3 (in Response)	Logistics (in Response)	Security/ Law Enforcement (in Response)	
S-HELP	Mitigation	Preparedness			Response	Recovery					







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SUPPORTING EXPLORATION AND ANALYSIS

EXPLORING REQUIREMENTS ACROSS

Phases of the crisis management 'cycle'

Variety of capabilities and all types of resources

Various concepts

Different planning horizons

SUPPORTING EXPLORATION AND ANALYSIS

MATCHING REQUIREMENTS AND SOLUTIONS

Identifying gaps

Assessing and prioritizing needs

Assessing available/ proposed solutions

SUPPORTING EXPLORATION AND ANALYSIS

SUPPORTING INVESTMENTS IN DISASTER RISK REDUCTION/MANAGEMENT

Balancing investments in constraining hazards; reducing exposure to hazards; reducing vulnerabilities; developing capabilities for response and recovery; and providing protection

Combining the considerations and coordinating investment decisions in the cycles of capability development and providing “strategic adaptiveness” (agility, foresight, capacity to adapt, community resilience)

Accounting for public and private financing, the use of international aid, and investments via multinational risk reduction projects

[anticipated contribution to “Science for Disaster Risk Management 2020”]

CONCLUSION

Encyclopedic effort

The taxonomy is being tested in practice in the ongoing work on CM gaps, trials, and solutions

Implementation opportunities beyond the initial tasking

Available to anyone interested

See more at <http://www.driver-project.eu/>