

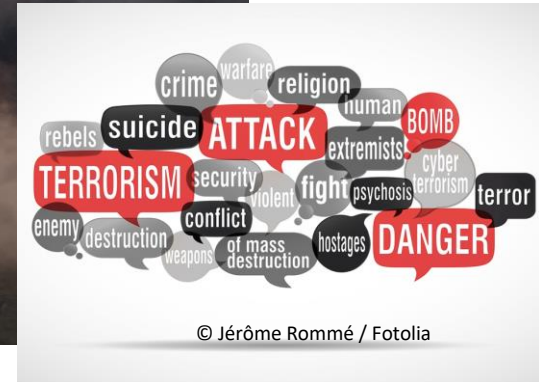
PROJECT OVERVIEW AND ACHIEVEMENTS

DRIVER+

Marcel van Berlo, TNO

18-20/02/2020, DRIVER+ Final Conference, Brussels, Belgium

RAPIDLY EVOLVING CRISIS MANAGEMENT LANDSCAPE



© Jérôme Rommé / Fotolia

CONSTANT NEED TO ADAPT, PREPARE, RESPOND AND RECOVER

NEED FOR CAPABILITY DEVELOPMENT AND INNOVATION

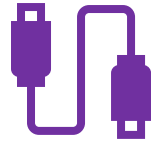
HOWEVER...

.

Time



What



Where



Who



How



Share



A wide landscape of rolling dunes under a blue sky. A stream flows through the center of the dunes. In the foreground, a wire fence runs across the frame. Several brown cows are grazing in the grassy areas. The text "INNOVATIONS ARE LIKE" is overlaid in white at the top, and "FINDING COWS IN THE DUNES" is overlaid in white at the bottom.

INNOVATIONS ARE LIKE

FINDING COWS IN THE DUNES



DRIVER+ seeks to improve the way **capability development** and **innovation management** are tackled, by **assessing** and **validating** (in realistic environments) **solutions** that are addressing the operational needs of Crisis Management practitioners



OUR APPROACH

FOUR PILLARS

1. Practitioner-centered

2. Multiple perspectives



3. Focus on sustainability

4. Inclusive approach

PRACTITIONER CENTERED

MAIN TARGET GROUP

- Gaps workshop
- Co-creation
- Knowledge transfer
- Adapt to their language, way of working
- Realistic context
- Trials are at the heart of the project





TRIALS + FINAL DEMO

Five events to operationalise and test both the solutions and the Test-bed components

1. Poland – Toxic mud flood (May 2018)
2. France – Forest fire (October 2018)
3. The Netherlands – Flooding (May 2019)
4. Austria – Earthquake (September 2019)
5. Poland and the Netherlands – Multi hazard (November 2019)



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

MULTIPLE PERSPECTIVES

VARIOUS BACKGROUNDS



Driving Innovation in Crisis Management
for European Resilience



Den Haag

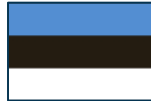


SISEKAITSEAKADEEMIA
ESTONIAN ACADEMY OF SECURITY SCIENCES



VARIOUS MEMBER STATES AND EUROPEAN COMMISSION

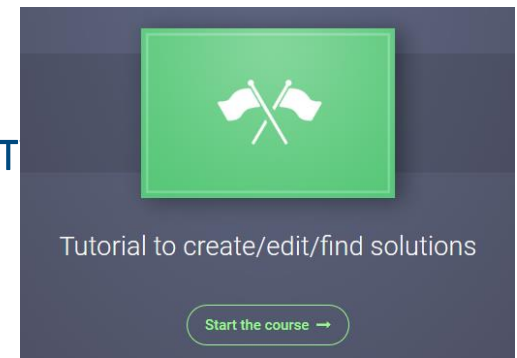
BOTH AS CONSORTIUM PARTNERS AND EXTERNAL COOPERATION PARTNERS



FOCUS ON SUSTAINABILITY

BALANCE BETWEEN SCIENTIFIC RIGOUR AND APPLICABILITY

- Scientifically robust approach
- Various types of crisis situations
- Easy to use
- Animations, videos, webinar, tutorials
- Training Modules
- User Workshop, trainings
- Find adopters, users, supporters



INCLUSIVE APPROACH

ACTIVELY REACHING OUT



- Reach out to external organisations, projects, networks, initiatives
- Invite to participate to Trials
- Ask feedback from external experts (incl Ethical & Societal / Advisory / Sustainability Board)
- Organize various events (I4CM, Policy-Research Dialogue Roundtables)
- Stimulate and support external organisations in using the outcomes



MAIN OUTCOMES

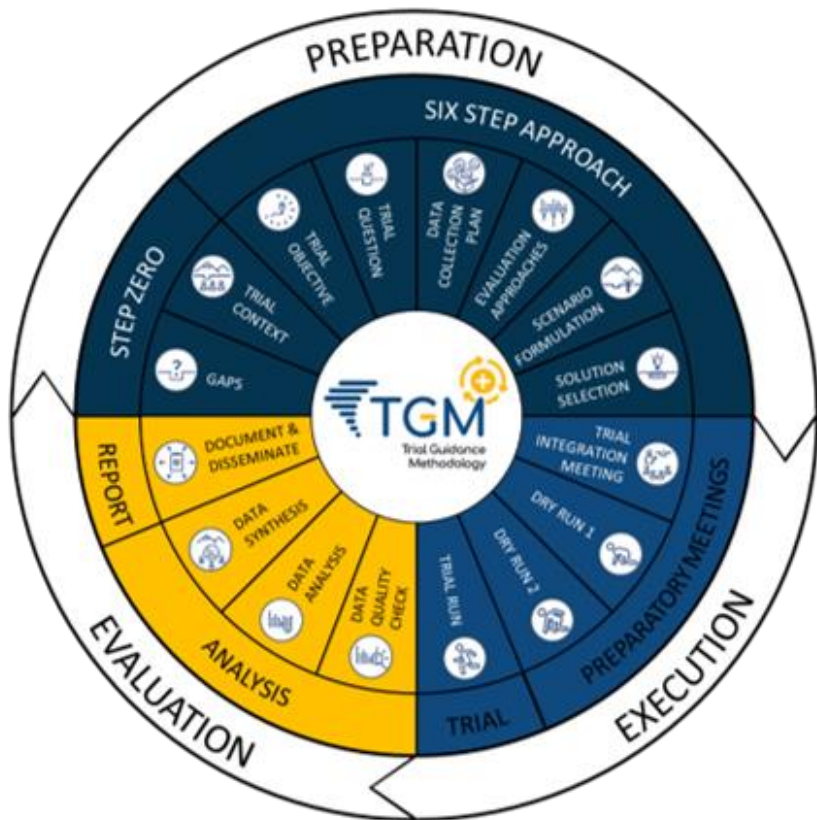
ALL OPEN SOURCE



Crisis Management Terminology
CEN Workshop Agreements

TRIAL GUIDANCE METHODOLOGY (TGM)

A PRAGMATIC AND SYSTEMATIC SUPPORT



Structured approach (step-by-step guidelines) to carry out a robust assessment of solutions and their potential impact on the socio-technical set-up of a Crisis Management organisation

Book navigation

TGT Tutorials

Trial Guidance
Methodology

Trial preparation

Analysis Technique -
Example

CM Gaps selection -
Example

Formulate Scenario -
Examples

Research Question -
Example

Solution Selection
Example

Trial Objectives -
Example



PREPARATION

| Trial preparation step



EXECUTION

| Trial execution step

The preparation of each Trial starts with defining the trial context, which refers to who, what, why and how. Within the GT, the very first step is to [add a new "Trial Group"](#) and invite the initial Trial Team to join this group. Trial Groups are virtual working spaces for organising trials. They allow the Trial Owner to organise a team and assign different roles and responsibilities to team members.

The starting point for designing the trial is to indicate which of the generic CM gaps the trial is going to address, followed by defining of the Trial Objectives, formulating the Research Questions, discovering and pre-assessing the potential solutions etc.. GT assures that this work proceeded in line with the TGM 6-step methodology, as illustrated below:

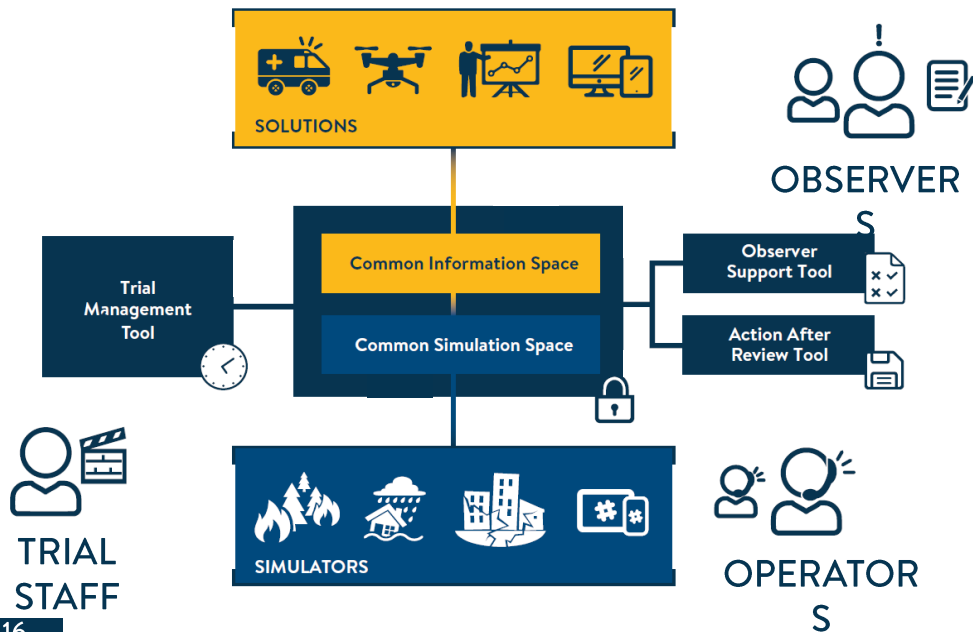
Trial Context > Trial Team > Relation to Gaps > Trial Design (6-step approach)



TGM defines this 6-step approach as *iterative* process, where steps in the process are iterated as many times as needed, until they reach the quality level that is deemed sufficient by the trial owners and their teams.

TEST-BED TECHNICAL INFRASTRUCTURE

CREATING A REALISTIC TRIALLING ENVIRONMENT

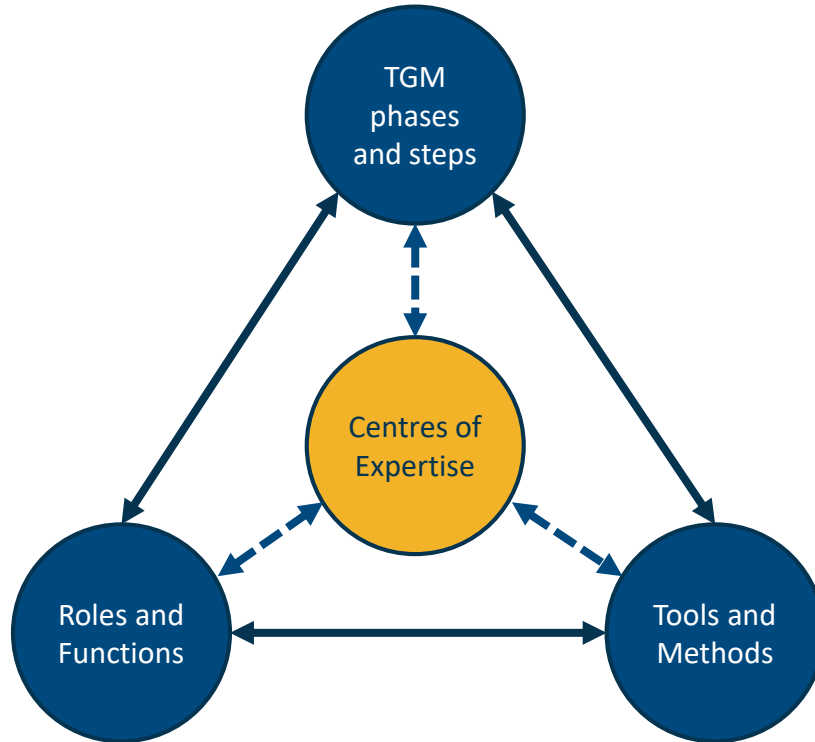


Free of charge and open source toolkit that allows to:

- **Connect** innovative Crisis Management solutions to each other to enable an **exchange of information** between them
- **Connect** different simulators to **create and control realistic crisis environments/scenarios**

TRAINING MODULE

BOTH E-LEARNING AND CONTACT PHASE



Multiple target groups:

- Trial organisers & CM practitioners
- Solution providers
- Technicians

Various didactics:

- E-lectures (video lectures)
- Quizzes
- Animations
- Video interviews
- Q&A and discussion forum
- Face-to-face workshops
- Group assignments

E-LEARNING VIA MOODLE PLATFORM

HOSTED BY ESTONIAN ACADEMY OF SECURITY SCIENCES (EASS)



Session 2.2 e-lecture and interactive exercises



Next: [2. Interactive exercises](#) ▶

1. Video



Table of contents

1. Video
2. Interactive exercises
 - 2.1. Exercise 2
3. Other materials
4. Feedback

PORTFOLIO OF SOLUTIONS

SELECT, SHARE AND UPLOAD SOLUTION INFORMATION



Lessons identified
Gaps addressed
Knowledge database

EXPERIENCES

*Shared place where
stakeholders meet
around solutions*



SOLUTIONS

Crisis Management Functions
Technology Readiness Level
Innovation Stage

Open-source and interactive repository for CM solutions (online market place) that:

- Provides access to information about **available CM solutions** (supply) and matches it with **practitioner needs** (demand)
- Enriches solution descriptions with **experiences** and lessons identified from practitioners
- Feel free to upload information on solutions yourselves (pos.driver-project.eu/)

OVERVIEW OF SOLUTIONS

Contact/report issues

Helpdesk

As an alternative to searching directly for solutions, you can also [search for CM gaps](#) and find out which solutions address the gaps you are interested in.

[PDF export](#)

Innovation stage

- Stage 1: Concept (2)
- Stage 2: Research and Development (3)
- Stage 3: Initial Piloting (13)
- Stage 4: Early Adoption/ Distribution (21)
- Stage 5: Market Growth (12)
- Stage 6: Wide-scale Adoption (8)

Crisis Cycle Phase

- Mitigation (22)
- Preparedness (41)
- Recovery (27)
- Response (51)

Crisis size

- Cross-border (36)
- Large scale (36)
- Local (52)
- Regional (51)

Solution of the day:



REAL TIME FLOOD RISK ASSESSMENT VIEWER

3DI - WATER MANAGEMENT

SCENARIO ENABLED PSYCHOLOGICAL FIRST AID (PFA) TRAINING

EHEALTHPASS

STORM

PUBLIC SAFETY HUB

VIEWTERRA EVOLUTION

EVACUATION MANAGEMENT PLATFORM "HERACLIS"

AIRBORNE AND TERRESTRIAL SITUATIONAL AWARENESS

ASIGN

CROWDTASKER

CRISISUIITE

THE HUMANITARIAN ICT FOR STRENGTHENING THE DISASTER RESILIENCE

PORTFOLIO OF SOLUTIONS (PoS)

COLLABORATIVE MISSION MANAGEMENT SERVICE - PLANET

LINK WITH DRMKC AND IFAFRI GAPS

CM Gaps Explorer

This page allows you to view existing gaps and to find out which solutions could be addressing them. If you can't find the gap that you are looking for, you can define a new one: [Add CM Gap](#)

[PDF export](#)

<p>Strategic</p> <p>Forest fires: fire behavior (DRMKC)</p> <p>Understanding the manner in which a fire reacts to the variables of fuel, weather, and topography, including variables as rate of spread and intensity, can help both in fighting the already ignited fires and in <u>prevention</u>.</p>	<p>Strategic</p> <p>Forest fires: climate change (DRMKC)</p> <p>Understanding how future changes in climate will affect forest fires and associated emissions of greenhouse gases, in Europe and globally, is important to determine adaptation and <u>mitigation</u> potential of forests.</p>
<p>Strategic</p> <p>Rapid identification of hazardous agents and contaminants (IFAFRI)</p> <p>The ability to rapidly identify hazardous agents and contaminants</p>	<p>Strategic</p> <p>Conduct on-scene operations remotely without endangering responders (IFAFRI)</p> <p>The ability to conduct on-scene operations remotely without endangering responders</p>
<p>Strategic</p> <p>Communicating with the public during a large crisis (DRIVER+)</p>	<p>Strategic</p> <p>Locating casualties in large forest fires (DRIVER+)</p> <p>Limited ability to identify the location of injured/ trapped/</p>

Forest fires: fire behavior

Endorsed by: [DRMKC](#)

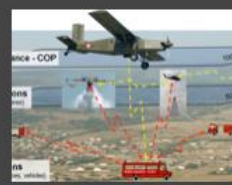
Motivation: Understanding the manner in which a fire reacts to the variables of fuel, weather, and topography, including variables as rate of spread and intensity, can help both in fighting the already ignited fires and in *prevention*.

Relevant hazards: [Wildfires](#)

POTENTIAL SOLUTIONS

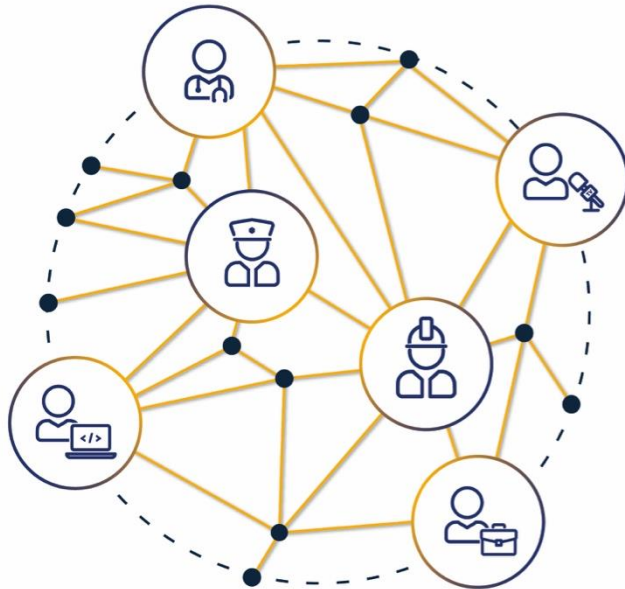
Following solutions could be addressing this gap.

Relevance: 1



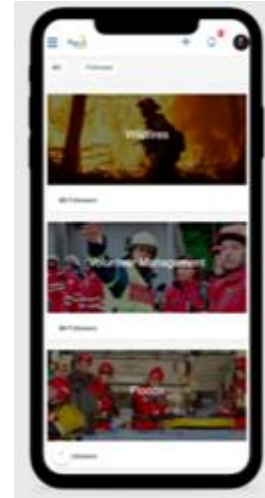
CRISIS MANAGEMENT INNOVATION NETWORK EUROPE

FACILITATING THE UPTAKE OF RESEARCH AND INNOVATION



Community of Practice with the aim to:

- **LinkedIn for Crisis Management Innovation in Europe** (‘One-stop shop’)
 - Foster innovation through **multi-stakeholder** and cross-sectoral interaction
 - Contribute to an **enhanced understanding of CM in Europe**
- JOIN [HTTPS://WWW.CMINE.EU](https://www.cmine.eu)



GLIMPSE INTO CMINE



Directory

News Forums Groups Live feed Events Projects Media center **Directory**

Results: 641

Refresh results as I move the map



Marcel Van Berlo

Netherlands



Jon H

United Kingdom



Andreas S

Hamburg Germany



Paolo C

Italy



Abby O

Netherlands



Andrew B

Switzerland



Loh Eng C

Singapore



Edmunds A

Latvia



Maksimiljan D



Gordon M

Search filters:




- First name
- Last name
- Type a keyword
- Type & select a location

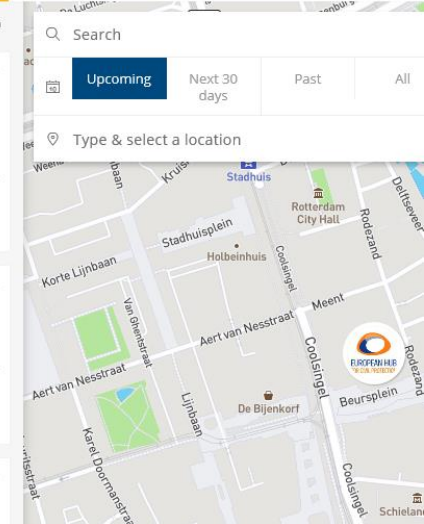
News Forums Groups Live feed **Events** Projects Media center Directory

Events

Results: 14

Refresh results as I move the map











-  Mar 17, 2020 · Rotterdam, Netherlands
European Hubs for Civil Protection and Crisis Management - Final Conference
 Are you going? Yes
-  Apr 21, 2020 · Brno, Czechia
CBRNe SUMMIT EUROPE
 Are you going? No
-  May 11, 2020 · Bergen, Norway
Natural Hazards in a changing world



GLIMPSE INTO CMINE

News Forums Groups Live feed Events Projects Media center Directory



<p>HKV</p> <p>Wien, Austria</p> <p>Real Time Flood Risk Assessment Viewer</p>	<p>Lancaster University</p> <p>Wien, Austria</p> <p>MoreIT - Responsible Innovation and Digital Ethics ...</p>	<p>AIOSAT</p> <p>Spain</p> <p>The AIOSAT system will allow the team/brigade commande...</p>	<p>Evacuation Management Platfor...</p> <p>Cyprus</p> <p>EMP HERACLIS is a software solution enabling the coordin...</p>	<p>I-React Project</p> <p>Paris, France</p> <p>I-REACT is the result of a three-year European Project that de...</p>
 <p>ILEAnet Project</p> <p>Paris, France</p> <p>ILEAnet aims to build a sustainable organisational La...</p>	 <p>HumanSurge</p> <p>Berlin, Germany</p> <p>HumanSurge seeks to improve the quality &amp; timeliness ...</p>	 <p>IMPROVER Project</p> <p>Gothenburg, Sweden</p> <p>The overall objective of IMPROVER is to improve Euro...</p>	 <p>SAYSO Project</p> <p>Bonn, Germany</p> <p>SAYSO's mission is to define the reference architecture an...</p>	 <p>INACHUS project</p> <p>Athens, Greece</p> <p>Crisis incidents may result in difficult working conditions fo...</p>
 <p>RESILOC H2020</p> <p>Frankfurt, Germany</p>	 <p>NO-FEAR</p> <p>Novara, Italy</p>	 <p>Standardisation Group</p>		



Volunteer Management




Wildfires



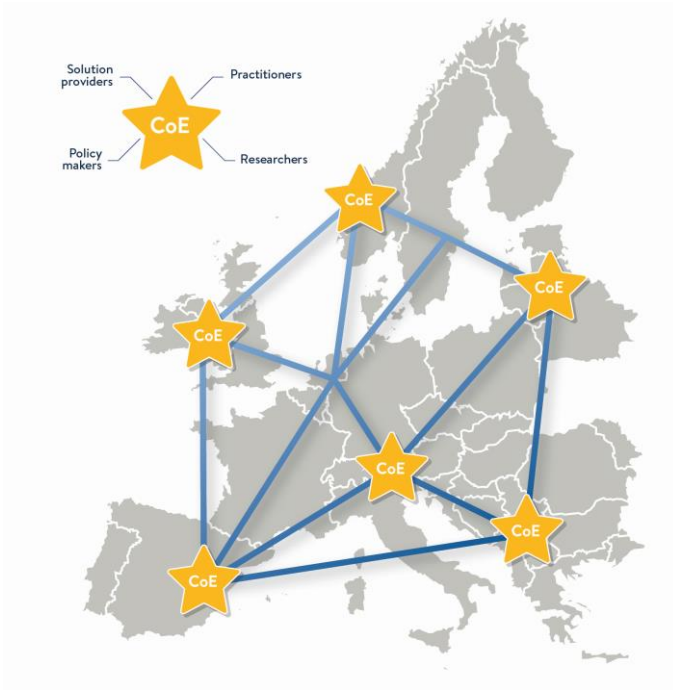
Floods

Standardisation Group



CENTRES OF EXPERTISE

EXPERT SUPPORT FROM AND TO PRACTITIONERS



- Organisation that **supports the capability development and innovation management** of practitioner organisations at the national or regional level
- **Adopts either the whole suite of DRIVER+ outputs or only some of its components**
- Establish a **pan-European network**
- Development of **CoE toolkit**

VARIETY OF ORGANISATIONS, SCOPE AND AMBITIONS

AND MORE CoEs, PLATFORMS AND CONTACT POINTS TO FOLLOW



CRISIS MANAGEMENT TERMINOLOGY

ENHANCING A SHARED UNDERSTANDING IN CRISIS MANAGEMENT

DRIVER+ TERMINOLOGY

Mutual understanding of practitioners and other key actors involved in international crisis and disaster management turned to be a key challenge. Barriers to understanding due to different cultural, organisational and educational background were identified to be main challenges of communication and information exchange of several activities such as border crossing cooperation. In this light, DRIVER+ decided to establish an English project terminology of key terms and associated definitions in order to enhance a common understanding within the project team and to contribute to a shared understanding within Europe.

The rationale behind this terminology can be found at the bottom of the page.

A list of Acronyms and Abbreviations used within the project can be found here.

List of Acronyms and Abbreviations

DRIVER+ Portfolio of Solutions

AFFILIATED VOLUNTEER

ASSESSMENT

CRISIS MANAGEMENT TERMINOLOGY

IMPLEMENTED IN THE PORTFOLIO OF SOLUTIONS

PoS Glossary

This page provides the default DRIVER+ definitions for all [DRIVER+ terminology terms](#), as well as the alternative definitions that are used by specific groups of *Crisis* Management stakeholders. [Follow this link to export the complete list as PDF.](#)

Search

Apply

	Description
Affiliated volunteer	An individual who is affiliated with an existing incident <i>response</i> organization or voluntary organization but who, without extensive preplanning, offers... from, an incident...
Assessment	test
	A qualitative or quantitative approach... by analysing potential hazards and

Actions taken during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

[read more](#)

CONTRIBUTIONS TO STANDARDISATION

CWA: CEN-CENELEC WORKSHOP AGREEMENTS

Standards support the transfer of knowledge and technology, and play a pivotal role in implementing and disseminating innovations and research findings.

1. prCWA 17514:2020 Systematic assessment of innovative solutions for crisis management – Trial guidance methodology
2. prCWA 17513:2020 Crisis and disaster management – Semantic and syntactic interoperability
3. prCWA 17515:2020 Building a common simulation space
4. prCWA 17335:2018 Terminologies in crisis and disaster management

One ISO New Work Item Proposal:

1. Societal Impact Assessment



SUMMARY

PROJECT VIDEO

THANK YOU.
ANY QUESTION?



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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driver-project.eu