

Project Plan for the CEN Workshop on the Trial Guidance Methodology (TGM) (approved during the Kick-off meeting on 2019-04-29)

1. Status of the Project Plan

- Initial draft Project Plan, to be further developed, prior to submission for approval
- Draft Project Plan to be approved at the Kick-off meeting of the Workshop
- Approved Project Plan

2. Background to the Workshop

2.1. Introduction to DRIVER+ project

Current and future challenges due to increasingly severe consequences of natural disasters and terrorist threats require the development and uptake of innovative solutions that are addressing the operational needs of practitioners dealing with Crisis Management. The European project DRIVER+ (Driving Innovation in Crisis Management for European Resilience) is a FP7 Crisis Management demonstration action aiming at improving the way capability development and innovation management are tackled. DRIVER+ has three main objectives:

1. Develop a pan-European Test-bed for Crisis Management capability development:
 - Develop a common guidance methodology and tool (supporting Trials and the gathering of lessons learnt).
 - Develop an infrastructure to create relevant environments, for enabling the trialling of new solutions and to explore and share Crisis Management capabilities.
 - Run Trials in order to objectively assess the value of solutions addressing specific needs using guidance and infrastructure.
 - Ensure the sustainability of the pan-European Test-bed.
2. Develop a well-balanced comprehensive Portfolio of Crisis Management Solutions:
 - Facilitate the usage of the Portfolio of Solutions.
 - Ensure the sustainability of the Portfolio of Tools.
3. Facilitate a shared understanding of Crisis Management across Europe:
 - Establish a common background.
 - Cooperate with external partners in joint Trials.
 - Disseminate project results.

In order to achieve these objectives, five sub-projects (SPs) have been established. **SP91 Project Management** is devoted to consortium level project management, and it is also in charge of the alignment of DRIVER+ with external initiatives on Crisis Management for the benefit of DRIVER+ and its stakeholders. In DRIVER+, all activities related to Societal Impact Assessment (from the former SP8 and SP9) are part of SP91 as well. **SP92 Test-bed** will deliver



a guidance methodology and guidance tool supporting the design, conduct and analysis of Trials and will develop a reference implementation of the Test-bed. It will also create the scenario simulation capability to support execution of the Trials. **SP93 Solutions** will deliver the Portfolio of Solutions which is a database driven web site that documents all available DRIVER+ solutions, as well as solutions from external organisations. Adapting solutions to fit the needs addressed in Trials will be done in SP93. **SP94 Trials** will organize four series of Trials as well as the final demo. **SP95 Impact, Engagement and Sustainability**, is in charge of communication and dissemination, and also addresses issues related to improving sustainability, market aspects of solutions, and standardization.

The DRIVER+ Trials and the Final Demonstration will benefit from the DRIVER+ Test-bed, providing the technological infrastructure, the necessary supporting methodology and adequate support tools to prepare, conduct and evaluate the Trials. All results from the Trials will be stored and made available in the Portfolio of Solutions, being a central platform to present innovative solutions from consortium partners and third parties and to share experiences and best practices with respect to their application. In order to enhance the current European cooperation framework within the Crisis Management domain and to facilitate a shared understanding of Crisis Management across Europe, DRIVER+ will carry out a wide range of activities, whose most important will be to build and structure a dedicated Community of Practice in Crisis Management, thereby connecting and fostering the exchange on lessons learnt and best practices between Crisis Management practitioners as well as technological solution providers.

2.2. Motivation for the Creation of this Workshop

Crisis Management (CM) organisations often face difficulties to assess the potential impact of a change in their socio-technical setup for several reasons, for instance the lack of adequate methodological know-how to assess innovative solutions. Investments in new, but inappropriate sociotechnical solutions, not only produce significant costs, but also have negative impacts for the operational performance of response organisations. Changes may be brought about by different types of solutions, such as new software or new training or workflow processes, each adopted with the aim to improve certain functions or activities. Assessing the impact of any kind of change is not a trivial task as it points to both capability development and to the identification of innovation. For this purpose, the DRIVER+ project has developed a specific methodology which consists of phases (Preparation, Execution, Evaluation) and steps (six-steps in the preparation phase) that will lead to the conduction of a so called “Trial”. The aim of such a Trial is to measure the changes an innovation brings and then analyse this changes thoroughly in order to realistically assess whether it addresses the CM organizations gap.

Within this methodology a “solution” is seen as a socio-technical entity: a tool, a software, a training, a procedure or any combination of those. Furthermore the solutions can be at different Technology Readiness Levels (TRLs). Hence not only “ready made” solutions can be assessed but also the development of innovation is supported. This is of special importance as Crisis Management is facing ever-changing challenges and is therefore in dire need of the most current technology or training.

In order to enable Crisis Management practitioners to organize and conduct a successful Trial the so called “Trial Guidance Methodology” (TGM) was developed during DRIVER+. It focuses on a step-by-step approach to carry out Trials in a pragmatic yet sound and ethical way. The



TGM is practitioner centered but also a co-creative process, meaning that the dialogue between Crisis Management practitioner, solution provider as well as methodological and, if needed also technological support is enforced. By supporting direct communication between Crisis Management practitioner and solution provider the needs and possibilities can be exchanged directly which leads to better understanding of each other as well as of the innovative solutions or their potential for further innovation.

As can be seen in Figure 2 the Trial Guidance Methodology consists of 3 phases which will be explained further in chapter 5.2.

The aim of the TGM is to ensure an objective assessment, which enables the end-user to find the right solution that is really able to help with the challenges being faced, by assessing it in a scenario that is as realistic as possible. The solution could be in the development phase or in the procurement process – depending on the TRL and the end-users interest. The idea behind this is to bring innovation to the end-user – more quickly and more effectively than nowadays.

2.3. The market environment

The market for Crisis Management is a fragmented one due to several reasons (feudalistic structures, specific gaps...). Hence a rather big gap between industry and Crisis Management practitioners is visible. To bridge this, the Trial Guidance Methodology enables Crisis Management practitioners and industry to create an event (so called “Trial”) in which a solution can be assessed objectively. This will lead to a more tailored research and development for the industry and more informed purchase decisions for the Crisis Management practitioners (and consequently money well spent for the public authorities).

2.4. The legal environment

As the assessment event (called Trial) aims at realism, it is performed by Crisis Management practitioners. Hence consent forms and GDPR are relevant. As also solutions at a lower TRL can possibly be assessed, non-disclosure agreements can be an option.

2.5. Existing standards and standard related activities and documents

The TGM is addressing 3 dimensions in its assessment: Crisis Management, Trial and Solution. Dimension in this regard means that the analysis is addressing each of them separately while taking into account how they influence each other. Example: If the realism of the scenario needs a fire officer with a special rank (Crisis Management Dimension) to interact with an innovative solution (Solution Dimension) but this officer is not available at the Trial date (Trial Dimension) s/he will have to be replaced by another person. This would be influencing the Crisis Management Dimension, which can be addressed appropriately in the analysis.

For the solution dimension the ISO 9241-11 is used for the usability assessment.

The most important existing standards for the Project Plan are listed in the following table.

Number	Title
ISO 9241-11	Ergonomics of human-system interaction - Part 11: Usability: Definitions and concepts



ISO/TR 18317	Intelligent systems for transport- Communication network preemption for the rescue in case of disaster and emergency communication. Use cases scenario.
ISO 22398	Societal security -- Guidelines for exercises
CEN/TS 17091	Crisis management - Guidance for developing a strategic capability

3. Workshop proposers and Workshop participants

Within the DRIVER+ project different organizations are developing the TGM. Main partners within the creation of the methodology are the Joint Research Centre (JRC) of the European Commission and the University of Münster (WWU) with the support of TNO.

The original proposer of the Workshop is WWU, the University of Münster, a German partner of the DRIVER+ consortium. Other consortium partners such as Public Safety Communications Europe (PSCE), Joint Research Centre (JRC) from the European Commission and Valabre - Centre de Recherche et d'Essais will contribute and therefore be part of the Workshop.

DIN, the German Institute for Standardization, as a CEN national member will hold the workshop secretariat.

The workshop is open to any interested party or entity that is willing to support the aims of the project plan.

All registered participants at the Kick-off Meeting can be found in Annex A.

4. Workshop scope and objectives

This Workshop will develop a CEN Workshop Agreement (CWA), which will define a methodology that enables an objective assessment of one or more socio-technical solutions (hardware, software, training, procedure, a mix of those) within a realistic Crisis Management scenario.

The target group of the workshop are Crisis Management practitioners concerned with innovation or procurement, Public authorities concerned with procurement (or writing tenders), Industry and Research as well as Research & Development.

5. Workshop programme

In the following the work plan as well as work already delivered will be presented.

5.1. Work plan

The overall timeframe for the envisaged CWA can be seen in Figure 1. This project plan can be commented by anyone in the given timeframe. The comments will be collected by the secretary. At the Kick-off meeting each of the received comments shall be discussed and considered.



The Kick-Off meeting will be held in Berlin on 29 April 2019. Any planned meeting can be a virtual meeting- to be decided at the kick-off meeting. The timeframe for the workshop is limited to the DRIVER+ project runtime. The Elaboration of the Draft CWA is planned from May to end of November 2019. The final draft will be ready by January 2020. It is aimed to publish the CWA by February 2020.

The CWA will be drafted and published in English.

	2019												2020	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Preparation of Project Plan	■	■												
Public availability of Project Plan			■											
Kick-off Meeting				■										
Elaboration of Draft CWA					■	■	■	■	■	■	■			
Finalisation and Approval of CWA												■	■	
Publication of CWA														■

Figure 1 Gantt chart Workplan

5.2. Work already delivered

The content of this workshop is the Trial Guidance Methodology (TGM) as presented in the deliverables of the DRIVER+ project¹. This methodology enables an objective assessment of innovative solutions for Crisis Management and consists of different phases and steps as depicted in Figure 2.

¹ Project results can be found on: <https://www.driver-project.eu/discover-our-results/project-public-reports/>

DRIVER+ Trial Guidance Methodology (TGM)

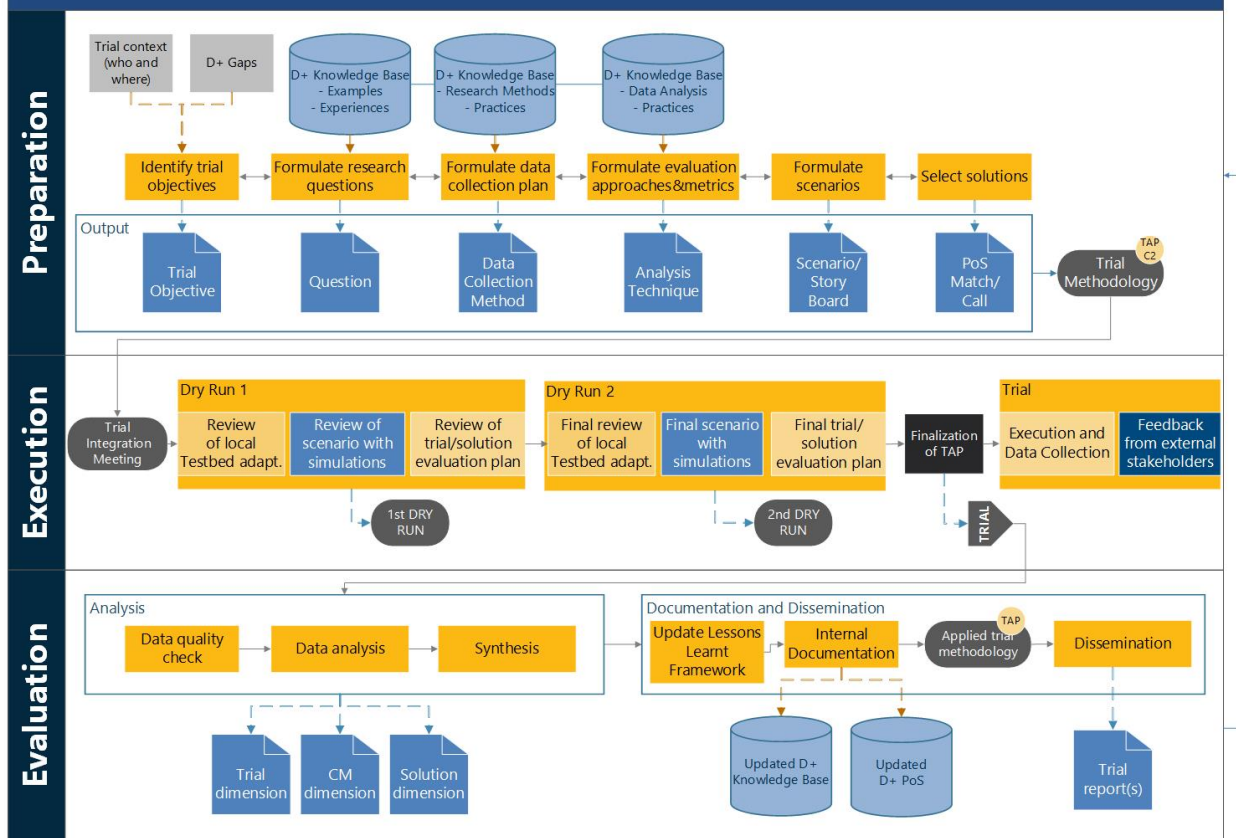


Figure 2: The DRIVER+ Trial Guidance Methodology (TGM); Source: DRIVER+ project

The three main phases are: Preparation, Execution and Evaluation. These three pillars lay the groundwork for a new approach to assessing innovative socio-technical solutions for Crisis Management, which comprises three main phases:

1. The **preparation phase** starts with identifying the needs, namely the Crisis Management gaps and the specific contexts those gaps occur in (the so called “Trial context”). This “Step zero” is the pre-requisite of the following iterative and co-creative DRIVER+ six-step approach. Those steps are namely: identify the Trial objective, formulate research questions, formulate the data collection plan, formulate evaluation techniques and metrics, formulate the scenario and lastly select solutions.
2. The **execution phase** consists of four major physical meetings: The Trial Integration Meeting (TIM), two Dry Runs and the actual execution of the Trial itself. The TIM is a kind of kick-off and the first real working meeting between Crisis Management practitioners and solution providers as well as the methodological and technical support. The Dry Runs are the rehearsal to be carried out before the Trials to ensure both the technical and methodological set-up. In the Trial the main focus is laid on data collection w.r.t. the execution of the Crisis Management tasks related to the identified gaps.

3. The **evaluation phase** covers different sub-steps for the analysis of the data collected during the Trial and also includes documentation as well as dissemination.

Here the first big difference to usual exercises can be seen: A dedicated evaluation that is in fact already addressed during the preparation phase. This is innovative to current procurement as well as development processes. Furthermore the whole TGM is facilitating direct communication between Crisis Management practitioners, industry as well as research and development. Therefore all of them are enabled to express their needs and work together towards innovative solutions tailored to real Crisis Management needs.

Within the DRIVER+ project the TGM is complemented by a system of technical tools that are connected and in this way create the technical test-bed. These tools are concerned with visualization, data logging or enabling other software tools to exchange information. But the methodology itself can be applied without any of the technical tools. Hence those are excluded from the scope of this CWA.

The foundation of the TGM draws on three main sources, which serve as the supporting knowledge base underlying the DRIVER + methodological approach:

- Concept Development and Experimentation (CD&E)
- A systematic literature review (SRL) of more than 200 peer-reviewed papers published in the last decade (2007-2017)
- Lessons learned from the first phase of the project. In this first phase so called “experiments” were conducted in a systematic way.

Project results¹ that build the basis for the CWA content are listed below:

- Deliverable D922.21 – Trial Guidance Methodology and guidance tool specifications (version 1);
- Deliverable D922.42 – The Trial Guidance Methodology handbook (first draft already available);
- D922.41 - Trial Guidance Methodology and guidance tool specifications (version 2).

6. Workshop structure

6.1. Workshop Chairperson and Vice-Chair

The Workshop Chairperson has five main responsibilities. If necessary or if assigned to him/her, the Workshop Vice-Chair may take over these duties from the Chair.

- Presides at Workshop plenary meetings.
- Ensures Workshop delivers the agreement in line with its Project Plan.
- Manages the consensus building process, decides when the Workshop participants have reached agreement on the final CWA, on the basis of the comments received.



- Interface with CEN-CENELEC Management Centre (CCMC) and CEN Workshop Secretariat regarding strategic directions, problems arising, and external relationships.
- Ensures information exchange with the Workshop Secretariat.

6.2. Workshop Secretary and Vice-Secretary

The Workshop Secretary has five main responsibilities. If necessary or if assigned to him/her, the Workshop Vice-Secretary may take over these duties from the Secretary.

- Formally register Workshop participants and maintain record of participating organisations and individuals.
- Offer infrastructure and manage documents and their distribution through the electronic platform.
- Prepare agenda and distribute information on meetings and meeting minutes/follow up actions.
- Initiate and manage CWA approval process upon decision by the Chairperson.
- Advise on CEN rules and bring any major problems encountered (if any) in the development of the CWA to the attention of CEN-CENELEC Management Centre (CCMC).

7. Resource requirements

Registration and participation at this CEN Workshop are free of charge, but each participant shall bear his/her own costs for travel, accommodation, and subsistence. If needed it is possible to reimburse reasonable travel costs of CEN Workshop participants external to the DRIVER+ project; upon previous request to the CEN workshops secretary (DIN).

The administrative costs of the CEN Workshop will be covered by the DRIVER+ project ,which received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 607798. The copyright of the CWA will be with CEN.

8. Related activities, liaisons, etc.

Related technical committees:

- ISO/TC 292 – Security and resilience
- CEN/TC 391 – Societal and Citizen Security (Liaison with DRIVER+)

9. Contact points

**Proposed Chairperson:**

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Annex A

Name	Organisation	Approved project plan
Alice Clemenceau	Valabre - Centre de Recherche et d'Essais	Yes
Bernd Hellingrath	University of Münster (WWU)	Yes
Chiara Fonio	Joint Research Centre (JRC) of the European Commission	Yes
David Lund	Public Safety Communication Europe (PSCE)	Yes
Laurent Dubost	Thales	Yes
Marcel van Berlo	TNO	Yes
Marie-Christine Bonnamour	Public Safety Communication Europe (PSCE)	Yes
Marion Bonlieu	ARTTIC	Yes
Nicola Rupp	University of Münster (WWU)	Yes
Noel Mitchell	CSN	Yes
Sven Mennebröcker	IBLF GmbH	Yes
Esther Kähler	DIN	–
Anja Seeliger	DIN	–
René Lindner	DIN	–