



*International Network of Evaluators & Guideline  
for a Methodological Approach in Exercise  
Evaluation*

## D2.1 A Framework for Exercise Types

R-Document, report

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## Executive Summary

The main goal of this report is to elaborate on all existing exercise types, which are used in the field of civil protection in the European Union and beyond. The purpose of this effort is to set a framework for the definition of adequate evaluation methods within the following tasks of work package 2 in INEGMA-E<sup>2</sup>.

The deliverable gives a short introduction into civil protection exercises in general, before focusing on the three main categories of exercise types:

- Tabletop Exercises (TTX)
- Functional Exercises / Command Post Exercises (CPX)
- Full-Scale Exercises (FSX)

In addition, the report elaborates on other discussion-based formats, which are more common in the Anglo-American and Australian context. This ensures an extensive examination of current exercise types during all following tasks and will help to conceptualize evaluation standards even fit for potential extensions of the European exercise-set currently in use.

Those additional types are Seminars/Walkthroughs, Workshops, Agency Presentations, Hypotheticals, Syndicate Progressives and Games.

## About this project

In the context of civil protection exercises, well-considered and extensive evaluation plays a crucial role in documenting best practices and shortcomings happening during those exercises. By noting lessons learnt evaluation is essential for a constant improvement in training efforts, thus promoting the capacities of response units in the European Union and its neighbouring countries for dealing with real disaster scenarios. INEGMA-E<sup>2</sup> is building upon an upcoming approach of independent evaluation and aims for a new level of exercise evaluation, which will meet high standards concerning documentation, replicability, and goal orientation.

The three pillars of the project are: 1) The development of an adequate and versatile evaluation methodology, addressing the different types of existing exercises. Each of those has different needs and goals, thus requiring diverse evaluation approaches. 2) Exploring the great number of existing tools, which can facilitate the data collection throughout the exercise process. Software solutions and technical tools like databases and handhelds empower the evaluators to collect a great amount of data even under difficult circumstances often part of the training reality. 3) The creation of an international pool of evaluators, which will be accessible by all institutions managing those kinds of exercises, to ensure the availability of highly skilled experts when needed. Those invited to this pool of evaluators will have to meet a certain skill set developed during the project.

A strong interconnection of all three essential fields - methods, tools and network – is crucial for setting new standards in exercise evaluation. By ensuring the provision of results for future exercises INEGMA-E<sup>2</sup> will significantly contribute to a continuous improvement of exercise outcomes. In addition, it will connect experts in exercise evaluation, will create a mechanism to share knowledge and good practices and will be designed for further grow and scale up.

## About this deliverable

This deliverable serves as basic document to integrate and relate the different exercise types in a next step into a logical order in DET columns combined with the adequate evaluation methodology worked out in D2.2. The report was elaborated in cooperation of DCNA, BBK and UniBW. BBK as official public authority responsible for civil protection and disaster management support in Germany provided valuable information concerning exercise types in use by making practical guidelines available and through expert consultancy together with UniBW.

During the desktop-research for this deliverable it became obvious that numerous considered papers, reports, and websites were addressing the field of exercises for civil protection and crisis management purposes in a very similar way. Thus, the selection made in this report can be seen as representative for an even greater number of sources available. Additionally, the project team will elaborate the topic throughout the project with published papers, as the body of knowledge will constantly grow in the process.

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# 1. Civil Protection Exercise Types

Civil protection exercises are defined as activities simulating a real-life emergency, so the training audience is able to test, practice and review procedures in defined roles. Exercises can be simple or complex. They might involve a small team practising a relatively simple drill, or a range of organisations simulating a major emergency.

Exercises can significantly improve the preparedness of systems and their capabilities and can be seen on two levels:

1. At the individual level, exercises are an opportunity to educate personnel on disaster plans and procedures through hands-on practice, while offering constructive critiques of their actions, and
2. On an institutional and/or system-wide level, well-designed exercises can reveal gaps in resources and inter-agency coordination, uncover planning weaknesses and clarify roles and responsibilities (Beerens, 2021).

An exercise project, as organized in the EU-framework, is more than the actual exercise. The exercises are an essential part of the project, but the project also includes preparatory actions and after actions, e.g. lessons learned activities, seminars, workshops and Post Exercise Discussions.<sup>1</sup>

The objectives of the exercise(s) conducted need to be SMART (Specific, Measurable, Achievable, Realistic and Time-related). Furthermore, the Commission highly advises to introduce qualitative and quantitative indicators to measure the potential achievements during an exercise, as indicators facilitate to assess whether an objective has been met or not.

There are several classifications of exercises, which are in use within the framework of the UCPM:

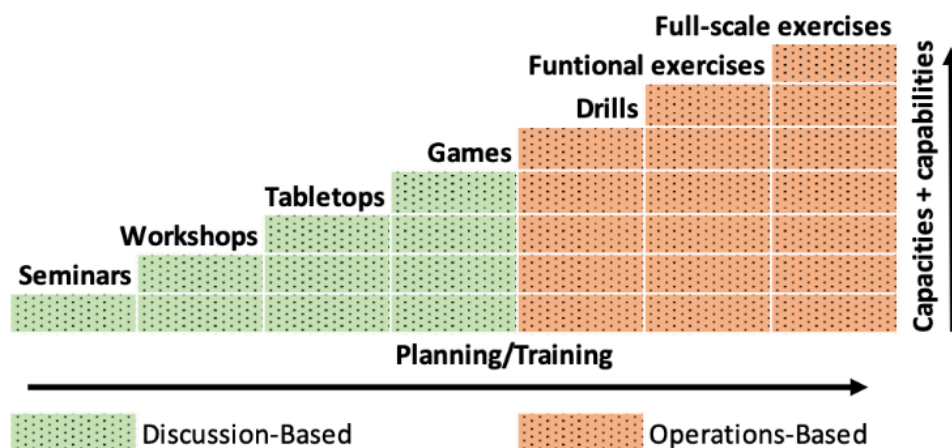


Figure 1: Types of exercises used in UCPM context

<sup>1</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#)

Three specific exercise types are considered a progressive approach regarding the efforts, which are necessarily undertaken to realize them. Those exercises are displayed in figure 1, namely Tabletop exercises, Functional exercises/Command-post exercises, and Full-scale exercises. Figure 2 shows the possible combinations in EU-funded exercise projects.

<p>Tabletop + Command post + Full-scale</p>	<p>Tabletop + Full-scale</p>	<p>Command post + Full-scale</p>	<p>Command post + Full-scale + Tabletop</p>
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Figure 2: Eligible exercise combinations - EU-funded<sup>2</sup>

Finally, it is important to mention that all exercises in a DG-ECHO funded project must be related and built upon the results archived in the previous exercises to ensure the constant progress in UCPM training.<sup>3</sup>

The different types of exercises performed in crisis management and civil protection contexts are now explained, following an order related to their complexity in planning and conduct. As it became obvious during desktop-research that numerous considered papers, reports, and websites were addressing the field of exercises for civil protection and crisis management purposes in a similar way, the selection made in this report can be seen as representative for an even greater number of sources available.

## 1.1 Tabletop exercises (TTX)

This format is a discussion-based exercise (DBX) where you simulate an emergency and generate discussion around it. TTXs are designed to put crisis response managers and practitioners in a situation to use existing plans and procedures and to take decisions according to a proposed scenario. Participants are presented a situation or problem that they are required to discuss and formulate the appropriate response or solution. Normally, the exercise requires no simulation other than a scenario and prewritten exercise injects and is suitable even when technical equipment is limited. “An emergency situation is discussed in a constructive manner with the goal of identifying and resolving problems, refining existing operational plans and better understanding each other’s responsibilities, resources and operational procedures.” (UNDRR, 2020, p. 21) This type of exercise is used to practice problem solving and coordination of services with or without time pressure. There is

<sup>2</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#), page 15

<sup>3</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#), page 7

no deployment or actual use of equipment or resources.<sup>4</sup> A tabletop exercise is an interactive exercise that helps to test the capability of management structures and plans to respond to a simulated event. The exercise

tests multiple functions of an operational plan and represents a coordinated response to a situation in a realistic simulation that involves different agents of disaster

management. It focuses on the coordination, integration, and interaction of existing plans, policies, procedures, roles, and responsibilities before, during, or after the simulated event and places heavy emphasis on communication between all participants.<sup>5</sup> A facilitator, in UCPM contexts often called mentor or trainer, guides the participants through a discussion of one or more scenarios. In that regard, the role of the mentor is quite flexible and changing dependent from the actual phase of the exercise – e.g. an observing role can alternate with an instructing one. The duration of a tabletop exercise depends on the audience, the topic being exercised and the exercise objectives. Many tabletop exercises can be conducted in a few hours, therefore being cost-effective tools to validate plans and capabilities.<sup>6</sup>

Tabletop exercises are good for:

- discussing contingency plans and procedures within the organization
- discussing the solution of specific tasks or relevant issues, e.g. in relation to crisis management
- discussing experiences from previous exercises
- discussing specific issues as a prelude to a larger exercise.<sup>7</sup>

A tabletop exercise can be conducted after the full-scale exercise (FSX) to debrief or discuss about some of the aspects, procedures, findings, or decisions during the FSX. Tabletop exercises can additionally or alternatively be used as a preparation for a bigger full-scale exercise too (see IRONORE2019 – DBX in advance to FSX).

## 1.2 Functional exercises / Command post exercises (CPX)

Functional exercises allow specific personnel to validate plans and readiness by performing their duties in a simulated operational environment. Activities for such an exercise type are scenario-driven, e.g. the failure of a critical business function or a specific hazard scenario. Functional exercises are designed to exercise specific team members, procedures and resources (e.g.

<sup>4</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#), page 15

<sup>5</sup> [The 5 Levels of Simulation Exercises - PreparedEx](#)

<sup>6</sup> [Exercises | Ready.gov](#)

<sup>7</sup> [National Exerciseguide \(Danish\)](#) – DEMA, page 5



communications, warning, notifications and equipment set-up).<sup>8</sup> Functional exercises examine and/or validates the coordination, command, and control between various multiagency coordination centers. They usually take place inside, such as in a classroom or Emergency Operations Center, and may include various forms of message traffic (written, digitally, telephone, radio). Even though a realistic environment shall be

simulated, no “boots on the ground” are involved (i.e., first responders or emergency officials to be deployed).<sup>9</sup>

A command post exercise is a functional exercise in which the field response and deployment is simulated, involving the headquarters and/or coordination centres that would normally intervene in an emergency. All plans, procedures, communications, and activities that would be performed during a real response apart from the field activities. Normally conducted from the real facilities.<sup>10</sup>

Command post exercises are good for:

- supporting the knowledge of and use of contingency plans
- testing and developing practical conditions in relation to crisis management
- testing collaborative relationships and develop knowledge of roles and responsibilities, both internally and across organizations (DEMA, 2011).

### 1.3 Full-scale exercises (FSX)

These are the most complex and resource-intensive operations-based exercises. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness. FSX involve functional and “boots on the ground” response, so they combine functional exercises with drills, in which field personnel of one or more emergency services operate together.<sup>11</sup> Full-scale exercises often include many international players operating under the host nation command system. Thus, first-responders from different nations are able to learn about the SOPs of one another, facilitating the cooperation in a possible future real scenario. “A full-scale exercise simulates a real event as closely as possible and is designed to evaluate the operational capability of emergency management systems in a highly stressful environment, simulating actual response conditions.” (UNDRR, 2020, p. 21) In a full-scale exercise, events are projected through an exercise scenario with event updates that drive activity at every level of the civil protection system. The exercise incorporates political, strategic, operational and/or tactical aspects and include the local, regional, national, European and/or international response. Full-scale exercises are conducted in a real-time-environment that is intended to mirror a real major emergency and many activities occur

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<sup>8</sup> [Exercises | Ready.gov](#)

<sup>9</sup> [Operations-Based Exercises \(fema.gov\)](#)

<sup>10</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#), page 15

<sup>11</sup> [Operations-Based Exercises \(fema.gov\)](#)

simultaneously. Therefore, the preparatory actions and planning needed to conduct a full-scale exercise are significantly greater than for other types of exercises.<sup>12</sup>

Full-scale exercises are good for:

- testing and training the tactical/operational efforts in connection to major incidents.
- trying out and training emergency preparedness roles under the practical conditions that apply on a daily basis
- testing contingency plans
- testing and training the cooperation and coordination of response personnel across authorities<sup>13</sup>

## Field Exercises

A field exercise is a smaller version of a full-scale exercise and focuses on more specific capacities or series of capacities, such as procedures for Rapid Response Teams (RRT), laboratory analysis or other sample collection and transport. (UNDRR, 2020, p. 21)

## Drills

These are operation-based exercises used to test a single operation function or system in a repeated fashion. A drill is a facilitated and supervised activity. During a drill a part of the overall emergency plan is reviewed and improved, and it should be performed as realistic as possible by employing any equipment or apparatus for the specific function. Unlike the TTX, drills require actual mobilization and use of resources. A drill can take an hour or a full day, but usually, it takes around 2 to 4 hours (Security, 2020) (Beerens, 2021) (UNDRR, 2020, p. 21)

## 1.4 Additional formats

Besides these three big exercise types, there are several smaller ones. The smaller ones are, like the table-top exercise, discussion-based exercise types. These types of exercises help to familiarize participants with current plans, policies, agreements, and procedures and are used to develop new ones:

- **Seminars/Walkthroughs**  
Seminars or walkthroughs orient participants to or provide an overview into strategies, plans, policies, or procedures. They are basic training for e.g. team members in a company or a first response organization and are designed to familiarize them with emergency response, business continuity and crisis communication plans and their roles and responsibilities as defined in the plans. Seminars/Walkthroughs can be valuable when an entity is developing

<sup>12</sup> [Union Civil Protection Mechanism - Technical Guide for UCPM Full-scale exercises](#), page 15

<sup>13</sup> [National Exerciseguide \(Danish\)](#) – DEMA, page 7

new plans or making changes to existing plans or procedures.<sup>14</sup> Sometimes also the name “Orientation Seminar” is used for this type of exercise, where little or no simulation elements are included.<sup>15</sup>

- **Workshops**

Workshops are more structured than seminars. Participant attendance and collaboration from relevant stakeholders is essential to obtain consensus and produce effective plans, procedures, and agreements.

- **Agency Presentations**

An agency presentation is a discussion forum where participants present an action plan relevant to their agency’s operational function. The agency is given a problem or issue in advance so it can prepare its presentation. This exercise type can lack realism and immediacy, but it provides a useful review of existing procedures and encourages the development of new approaches. Agency presentations can be written and conducted with short lead times and are cost and time efficient. They are useful as learning activities, particularly when they are used to explore responses to a simulated threat or scenario in a non-threatening environment. (Australian Institute for Disaster Resilience, 2012, p. 9)

- **Hypotheticals**

A hypothetical is a style of discussion based exercise where problems are posed by a facilitator and considered by a panel of individuals. The facilitator keeps the activity moving by asking probing questions and introducing unexpected events as the scenario unfolds. Hypotheticals are often conducted in front of an audience of emergency managers and other stakeholders, and require careful preparation and a relatively longer lead-time than other discussion based exercises.

They are relatively inexpensive to prepare and to conduct. None the less, it is difficult to find an experienced and effective facilitator for this format. Hypotheticals are a particularly effective way to build a shared understanding of different approaches to problems. In addition, they are also useful for simulating operational stress by requiring participants to analyse complex problems and develop appropriate responses in real time. (Australian Institute for Disaster Resilience, 2012, p. 9)

- **Syndicate progressives**

Syndicate progressive exercises introduce problems of developing complexity to be considered by groups in syndicate. The term progressive refers to the graduated development of complexity that will usually occur in an emergency situation and which may be replicated in the exercise via a series of special ideas. Each problem contains a statement and three or four questions designed to focus syndicate attention along a desired path. For example, given a particular set of circumstances, a series of problems could focus on prevention, preparedness, response and then recovery.

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<sup>14</sup> [Exercises | Ready.gov](#)

<sup>15</sup> [The 5 Levels of Simulation Exercises - PreparedEx](#)

Syndicate exercises are relatively inexpensive to run but require careful preparation. They are useful for exercising groups of strategic managers or team leaders and promote sharing experiences and building common approaches to complex problems by ensuring multi-agency representation in each group. Syndicate exercises have a strong learning focus as they encourage participation in small groups. (Australian Institute for Disaster Resilience, 2012, p. 9)

- **Games**

A simulation that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or hypothetical situation. Identifying critical decision-making points is a major factor in the success of games.<sup>16</sup> Crucially, games are decision-driven simulations, meaning the course of the exercise changes depending on actors' decisions.

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<sup>16</sup> [https://emilms.fema.gov/is\\_0120c/groups/41.html](https://emilms.fema.gov/is_0120c/groups/41.html)

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