



IN-PREP

**“An INtegrated next generation PREParedness programme
for improving effective inter-organisational response
capacity
in complex environments of disasters and causes of crises”**

D5.5 – The IN-PREP C2s and COP (Iteration One)



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Document Summary Information

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Executive Summary

Within IN-PREP, Work Package 5 is responsible for the development and adaptation of the components that constitutes the IN-PREP Mixed Reality Preparedness Platform as designed in WP3. On the other hand, Work Package 4 is responsible for the development of the Scenario Building and Executing tool and the Recommendation Engine. As a result, WP4 (Scenario Builder & Recommendations Engine) and WP5 (rest IN-PREP components) constitutes the main implementation work packages of the IN-PREP project. These development activities are in accordance to the user requirement list provided by the WP2.

The current deliverable (which acts as an accompanying report to the C2 and COP, developments, adaptations and customisations) is focused on the WP5 activities that are related to the C2 components provided by partners and end users. C2 components are delivered in two phases. This document presents detailed information about the provided C2 systems, technical details about the required adaptations and developments and the current development status of these C2 components. Later in the project (M31) the final and definite version (v2) of these components will follow.

Up to now the developments and adaptations of the IN-PREP C2 documents have been driven by two main forces: on one hand the user/technical requirements and system architecture and on the other hand the specificities of the user scenarios that have been animated in the context of the 1st TTX (Spoleto, November 2018), the 2nd TTX (Savona, June 2019) and ultimately the 3rd TTX (currently under preparation, Kampen, October 2019).

As such the present document describes advancements of IN-PREP C2s towards upgrading collaborative response training and collaborative response planning as well as the tight coupling of the C2s with the scenario building process being the first building block and an effective training process of the civil protection organisations.

The IN-PREP C2s have efficiently patched the gap between operational use (being the primary mission of a command, control and incident management system) and training use. In doing so, a set of advanced functionalities have been delivered.

First and foremost, the C2s have been appropriately adapted to bi-directionally exchange information with the Scenario Building and Execution Tools. In this way the C2s become, from operational tools, inject and incident enablers of the training session which in turn guide actions and reactions of the trainees. On top of that the developments include a set of novel functions that enhance collaborative response training, such as the incident and resource sharing mode and the communication with UAVs for supporting real and fictional sensor input and visualisation. It is important to note that the developments of the C2 functions have been based on interoperable protocols to facilitate information and data exchange with other tools and in parallel support a novel function of digitising response plans; the latter towards facilitating one of the novel objectives of IN-PREP project for enhancing collaborative response planning of diverse civil protection organisations.

Last but not least, the current status of IN-PREP C2s developments and customisations includes intuitive visualisations and attention to symbology so that the trainees are offered with a truly efficient and effective response training and response planning system which is easy to be used, enhances their actions, reactions, communication and information exchange and provides a step change to the training process of the operational and tactical teams.

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