**D3.3 C2 Definitions and function**

**(Iteration One)**

**Executive Summary**

Nowadays, public and private safety agencies, such as civil protection, police and fire brigade agencies, base the management of emergency situations they respond to on sophisticated software tools that provide “command” and “control” actions. These software tools are known as Command & Control Systems (C2). C2 systems support civil protection agencies’ critical operations that are related to preparedness, mitigation, response and recovery phase of the disaster lifecycle. Using C2 systems, agencies are able to execute a set of operations (such as organizing preparedness operations, analyzing emergency situations, managing emergency response in order to facilitate incident response and communication in the field, etc.), in an efficient and effective way.

However, the existence of emergency situations that spread across borders, requires the involvement of different civil protection agencies, often with different C2 systems. Communication and organization issues between involved agencies usually has a negative impact on the emergency response effectiveness. The IN-PREP project aims to increase interoperability between different agencies and C2 systems by providing a collaborative platform that puts emphasis mainly on the Preparedness phase and then on the Response phase of the Crisis Management cycle.

Deliverable D3.3 presents the design principals and capabilities of a typical C2 system. Moreover, the encapsulation of C2 functionalities by the IN-PREP platform and the added valued these functionalities add to the IN-PREP platform are presented.