FloodNorthALB: LESSONS LEARNED FROM THE IMPLEMENTATION OF A UCPM FULL-SCALE FLOOD PREPAREDNESS EXERCISE IN ALBANIA

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ABSTRACT
The Union Civil Protection Mechanism funded the implementation of the FloodNorthALB Full-Scale Flood Preparedness Exercise in Albania. As part of the exercise scenario, the Albanian authorities hosted International Capacities from various European countries, which participated in joint flood and rescue operations in the Shkodër Region. The application of a structured Exercise Evaluation Framework generated important Key Lessons Learned for the Albanian authorities that can be exploited for the benefit of enhancing their disaster response capabilities.

Keywords: Disaster Management, Preparedness Exercises, Floods, Evaluation Framework, Lessons Learned.

1. INTRODUCTION

European Union, recognizing the need to effectively manage the increasingly complex risks from natural hazards and security threats, has recently launched the '**EU Preparedness Strategy**' [1]. This strategy constitutes a comprehensive framework for conducting 'whole-of-society' preparedness activities and for developing an integrated '**preparedness**' culture across all EU policies. The **Union Civil Protection Mechanism** (**UCPM**) [2] constitutes a cornerstone of this strategy, as well as the backbone of applied solidarity between European countries in the case of emergencies. UCPM, under the umbrella of the '**Union Civil Protection Knowledge Network**' endorses the implementation of a wide range of disaster preparedness activities, including the implementation of **Preparedness Full-Scale Exercises (FSXs)**. A Preparedness FSX is a complex endeavour, during which response units are physically deployed in the field and the entire disaster response framework of a region / nation is tested. UCPM Full-Scale Exercises focus on testing a nation's ability to activate the UCPM and to provide effective Host Nation Support (HNS) Services to the incoming International Capacities. A UCPM FSX constitutes a unique opportunity for a nation to test and strengthen its disaster response capabilities for the benefit of its citizens.

The **aim** of this paper is to provide an overview of the **FloodNorthALB (FNA) UCPM Full-Scale Flood Preparedness Exercise** [3] and to present the **Key Lessons Learned** identified through the application of the comprehensive **FAIM ('FAcilitate – IMprovement) Exercise Evaluation Framework** on the FNA exercise activities. These findings are discussed within the context of the latest regulatory and scientific developments in the domain of applied civil protection and are compared with the evaluation results which have been produced during the implementation of past UCPM Full-Scale Exercises.

2. CONTEXT: THE FloodNorthALB UCPM PROJECT

Major disaster flood events have historically taken place in the Shkodër Region of Albania, causing substantial loss of human life, widespread material damages, and adverse long-term financial conditions [4]. Addressing this substantial flood risk, the Albanian authorities were awarded a competitive contract for the implementation of the **FloodNorthALB (FNA) project** ('**Managing Complex Floods in North Albania through Cross Border Host Nation Support and Joint Cooperation**') under the **UCPM Full-Scale Exercises Call** (UCPM-2023-KAPP-EX). The main **aim** of the FNA project is to improve the civil protection preparedness and response capabilities of the Albanian authorities in dealing with large, complex disasters

that require joint response coordination facilitated via the UCPM. The FNA Project Consortium, led by the Albanian National Civil Protection Agency, also includes the National Civil Protection Agencies of Cyprus, Greece, and Montenegro, Croce Rossa Italiana, the Albanian Center for Development and Democratization of Institutions, European University of Tirana, and European University Cyprus.

The FNA FSX took place in Shkodër, Albania from the 7th until the 11th of April 2025. The **exercise scenario** was based on a real-life flood disaster which devastated the Shkodër region in 2011. As part of the FSX scenario the Albanian authorities declared a '*state of national emergency*' and requested the **activation of the UCPM** and **of bilateral civil protection agreements** with neighbouring countries. These activations resulted in the deployment of several International Flood Search and Rescue Capacities (Bulgaria, Greece, Italy, Kosovo, Montenegro, North Macedonia). A European Union Civil Protection Team (**EUCPT**), comprising Civil Protection Experts and supported by a Technical Assistance Team (**TAST**) from Cyprus, was also deployed in order to facilitate the communication and coordination activities between the Albanian authorities and the International Capacities.

3. EVALUATION: THE FAIM EXERCISE EVALUATION FRAMEWORK

The design and application of a **robust evaluation process** allows the elaboration of meaningful **Lessons Learned** from the implementation of a preparedness exercise. The latter allow civil protection authorities to develop a focused improvement plan with the aim of strengthening their disaster response capabilities. For this reason, HSEEP suggests that the implementation of a preparedness exercise without the application of a meaningful exercise evaluation process has no significant value [5]. For the case of the FNA FSX, the structured **'FAcilitate – IMprovement' (FAIM) Exercise Evaluation Framework**, designed by the main author, was employed. The framework was applied during the FSX by a large multi-national team of expert evaluators, and was managed by all authors of this paper.

The application of the FAIM evaluation framework has been extensively tested and empirically validated during the implementation of past **UCPM Disaster Preparedness Full-Scale Exercises** ([6],[7]). FAIM is an **open evaluation framework**, with a **broad data elicitation perspective** which foresees the development of targeted **Thematic Evaluation Reports** from expert evaluators, in addition to the implementation of traditional participant feedback activities like **After Action Reviews**. The **FAIM analysis phase** is based on the **structured triangulation** of the full set of evaluation information elicited from all sources during the implementation of the preparedness exercise. The ultimate **output** of the FAIM framework comprises the '**Lessons Learned**' from the exercise implementation. A detailed description of the 'FAIM' Exercise Evaluation Framework and its application during the FNA FSX can be found in the project's 'Exercise Evaluation Plan' Deliverable [3].

4. KEY LESSONS LEARNED & DISCUSSION

The application of the FAIM Exercise Evaluation Framework during the implementation of the FNA FSX resulted in significant findings related to the response capabilities of the exercise actors. These findings are rigorously documented in an **analytic exercise evaluation report** [3]. The main **Key Lessons Learned (KLLs)** from this report, as well as a brief discussion on their implications, are presented below:

KLL1. ***The Albanian authorities possess the capability to activate the UCPM in a timely, accurate, and effective manner***.

The Albanian authorities performed all foreseen UCPM activation steps in a timely and accurate manner, as these are described in the official UCPM Host Nation Support (HNS) Guidelines [8]. This is despite the fact that they are not currently able to utilise the services of the CECIS platform. Their capabilities can be

further improved by increasing the quantity and quality of technical information included in the UCPM Activation Request Letter, as this is foreseen in the updated UCPM HNS guidelines [8]. While real-life UCPM activations have dramatically increased in recent years (59 countries activated the UCPM in 2024 only), the UCPM technical activation steps followed by the Host Nations frequently lack important information which can improve for the effectiveness of the UCPM deployment. Similar conclusions were reached during the implementation of past UCPM exercises [7].

KLL2. ***The Albanian authorities possess the capability to offer a very good level of HNS services to the incoming UCPM International Capacities. The quality and the effectiveness of some of these services can be further enhanced and improved***.

The Albanian authorities illustrated their ability to provide solid support to the incoming UCPM International Capacities, both at the designated Entry Points (land borders and airport), and at the designated Reception Departure Centers. Albanian Liaison Officers were attached to each International Capacity and provided significant communication and coordination support for the implementation of flood search and rescue activities, as foreseen in the UCPM HNS Guidelines [8]. The Albanian authorities also offered a pre-set Base of Operations to the International Capacities. These HNS services constitute a very good framework for allowing the incoming International Capacities to contribute effectively to the response efforts; however, a number of shortcomings were identified with regards to the consistency of the support offered by the Liaison Officers, and the quality of some services offered at the Base of Operations. Similar challenges have been identified in previous UCPM exercises [6,7].

KLL3. ***The Albanian authorities (as well as the International Capacities) can improve their capacity to effectively implement 3Cs activities*** (***Communication, Collaboration and Coordination) for the purpose of facilitating flood search and rescue response activities***.

The importance of 3Cs for the effective implementation of international search and rescue activities is universally acknowledged. International UCPM deployments are complex endeavours, involving a large number of response 'actors', and facing unique, country-specific environmental and cultural challenges. In UCPM exercises, a team of EU experts (EUCPT) is deployed in order to support 3C activities between the Local Emergency Management Authority (LEMA) and the International Capacities. However, the intrinsic complexity of the situation means that 3C challenges are frequently encountered, especially during the initial stages of the deployment (both in real-life and in simulated response operations [6,7]). These challenges were also observed during the implementation of the FNA FSX, especially with regards to the initial (FSX Days 1 & 2) communication activities between LEMA, EUCPT, and the International Capacities.

KLL4. ***The FNA FSX showcased that the use of ICT tools and modern / emerging technologies can significantly enhance the effectiveness of disaster response operations, under the condition that rigorous training activities precede their application.***

The implementation of the FNA FSX provided a solid framework for testing the effectiveness of specific ICT tools and modern / emerging technologies during the implementation of disaster response operations. Typical examples included the use of the standard Virtual OSOCC platform for the facilitation of 3C activities, and the deployment of drones for the support of flood search and rescue response tasks. While the perception of all FSX participants is that the exploitation of such tools and technologies can significantly benefit the effectiveness of response operations, their coordinated use faced challenges due to the lack of a common understanding on their application. These challenges can be addressed through the implementation of rigorous joint training activities between all actors involved. Similar challenges were also observed during the implementation of past UCPM exercises which were evaluated under the FAIM framework [6,7].

5. CONCLUSIONS & WAY FORWARD

The implementation of the FNA UCPM Full-Scale Exercise constitutes a significant strategic activity on behalf of the Albanian authorities in their effort to enhance and improve their disaster response capabilities. The use of the FAIM exercise evaluation framework provided the basis for the comprehensive evaluation of all aspects of the FNA exercise implementation and the elaboration of the Key Lessons Learned. The latter can now be exploited by the Albanian authorities for the development of an **Improvement Plan**, **targeting the long-term improvement of their disaster response capabilities**. This is an outcome which constitutes the main aim of the overall UCPM Full-Scale Exercise Program.

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