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NEW CIVIL PROTECTION ELEMENTS IN THE “EUROPEAN URBAN WATER AID” PROJECT

Abstract

With the professional supervision and management of the Hungarian Ministry of Interior, National Directorate General for Disaster Management National Civil Protection Chief Inspectorate an 18 months lingering disaster management project has been launched on January 1st, 2016. Under EUrban Water Aid (EUWA) name, EUR 644 thousand total budget with the purpose to provide the fastest response on flood disaster situations.

EUWA project has duplex goals to deliver, a complex urban water treatment and flood rescue field exercise on the River Tisza under the European Civil Protection Mechanism with the contribution of international disaster management bodies participating, waterworks and the Hungarian Red Cross. During the exercise the deployment of the urban water purification (WP), the high capacity pumping (HCP), and the heavy urban search and rescue (USAR) modules – thus the HUNOR rescue organizations will take place, aiming to taste parallel the operation of host national support. A further key objective of the project is to develop a manual in the topic of urban water purification and emergency water supply to the EU-level interventions which should be also useful in the damaged areas.

Keywords: flood rescue, flood containment, field exercise, disaster management, water purification, emergency water supply

ÚJ POLGÁRI VÉDELMI ELEMEK AZ „EUROPEAN URBAN WATER AID” PROJEKTBEN

Absztrakt

A Belügyminisztérium Országos Katasztrófavédelmi F igazgatóság Országos Polgári Védelmi F felügyel ség szakmai felügyelete és irányítása alatt 18 hónapos uniós projekt indult 2016. január 1-én. Az EUrban Water Aid (EUWA) 644.000 euró összköltségvetés projekt célja az árvízi veszélyhelyzet során alkalmazható gyorsreagálású er k felkészítése.

Az EUWA projekt kiemelt célja az európai polgári védelmi mechanizmus keretében a Tiszán egy városi víztisztító, árvízi mentési, vízkár elhárítási gyakorlaton megtartása a Tiszán, a nemzetközi katasztrófavédelmi szervek, a vízművek, és a Magyar Vöröskereszt bevonásával. A gyakorlaton megtelepítésre kerül egy városi víztisztító (WP), a nagy kapacitású szivattyú (HCP), és bevonásra kerül a városi kutató és mentési (USAR) modul - így a HUNOR Ment szervezet, valamint tesztelik a magyar fogadó nemzeti támogatást is. Projektcél, hogy dolgozzon ki egy veszélyhelyzeti vízellátási kézikönyvet, amely hasznos lehet egy EU-szintű beavatkozáshoz.

Kulcsszavak: árvízi mentés, vízkár-elhárítás, terepgyakorlat, katasztrófavédelem, víztisztítás, veszélyhelyzeti vízellátás.

1. INTRODUCTION

The joint application of the National Directorate General for Disaster Management Hungary, Budapest Waterworks, Belgrade Waterworks and Sewerage, Republic of Croatia National Protection and Rescue Directorate and the Fire and Rescue Corps of the Slovakian Republic successfully applied and gained direct European Union support [1].



1. Picture: Logo of EUWA projekt, resource: <http://www.euwa2016.org/>

Within the framework of the eighteen-month tender called EUrban Water Aid (EUWA) financed by the European Union participants will complete a complex urban water treatment and flood rescue field practice on the Tisza river. Beside Budapest Waterworks and disaster management organizations of four countries the Hungarian Red Cross also participates in the realization of the program, with a total budget of 644 thousand euro [2].

The project organization – established with the assistance of the four countries' disaster management agencies and water service providers – will jointly develop a best practices manual about the cooperation between urban search, rescue and mobile water purification units in case of disaster situations and further improve the previously created operation management and GIS applications which are based on risk maps [3].

2. METHODS

Milestones in the Project:

- 1) Kick off in Brussels, January 28, 2016
- 2) Meeting and Workshop Concluded in Budapest, March 9, 2016
- 3) The creative phase of the international flood control project continued, in Szentendre, between June 29 and 30.
- 4) Table Top Exercise, International practice in East-Hungary in Nyiregyhaza, September 15, 2016, [4]

Workshops during Project:

- 1) Basis of cooperation between USAR and WP EU CP modules in emergencies, Budapest, 7–8 March 2016.
- 2) Presenting the capacities of WP and USAR modules, June 29 and 30, 2016, Szentendre.
- 3) Harmonization of WP and USAR in action with host nation support, August 2016, Belgrade, Serbia.

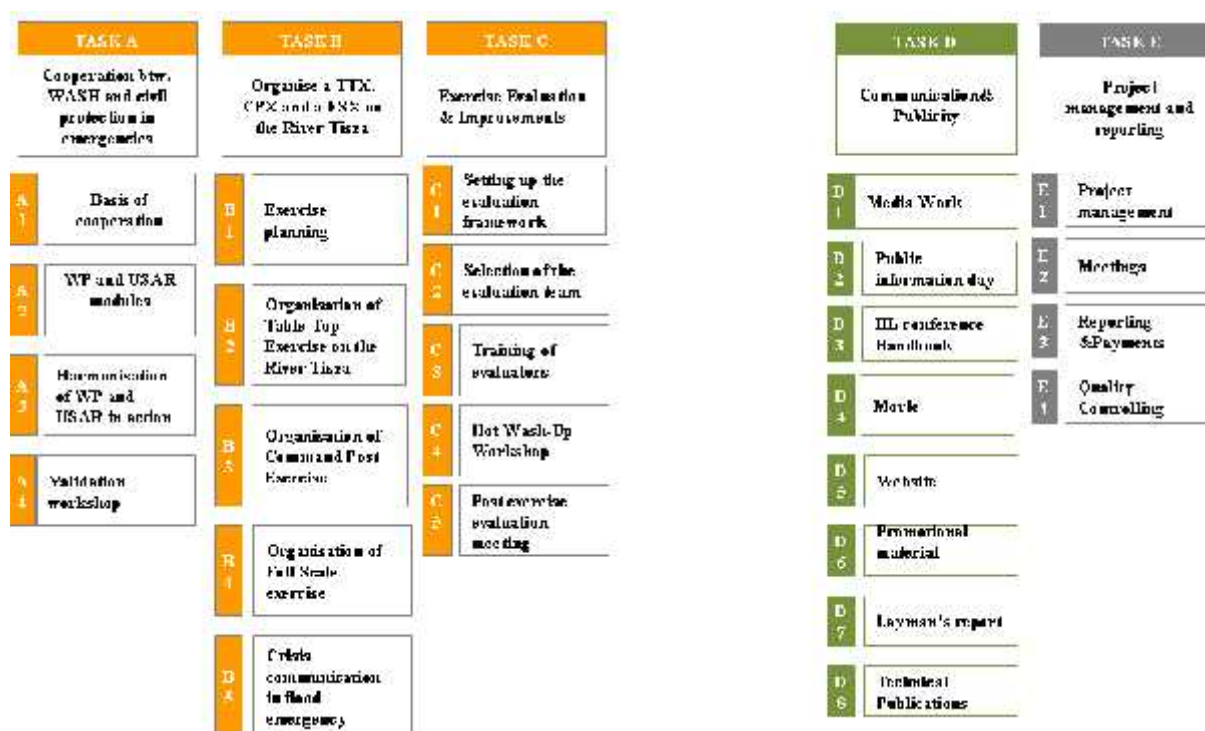


2. Picture: First Workshop in Budapest, Photo: David Valkó, BWW

3. RESULTS: NEW CIVIL PROTECTION ELEMENTS

As the future is concerned, disasters getting intensified with the effects of climate change, water supply of the population (evacuated or lacking drinkable water at home) will be more and more important in this region as well as it occurs already in large scale emergencies all over the World. A specific characteristic of floods and water-related disasters is that population and infrastructure – especially water supply system – are both struck at the same time. Lacking an operational drinking water network, search and rescue units deployed in the area have to provide for their own drinking water needs as well, raising logistic costs, unit size and putting unnecessary burden on themselves.

Water Purification units – especially those of non-authority background – face serious challenges in times of deployment, due to lack of familiarity with the area and to their difficulties of connection to the local disaster management centers.



3. Picture: EUWA Project Plan, Created: Agnes Rajacic [5]

Generally, USAR modules are deployed first, followed by WP modules later on, yet in most cases WP modules are responsible solely for the drinking water supply of the local population, while USAR teams remain to depend on drinking water transported for them from

a distance. This way, both WP modules are wasting capacities and USAR modules are wasting resources on unnecessary logistical work and expenditures.

There are numerous precedents where USAR and WP modules were deployed parallel (2010 Haiti, 2011 Japan, 2013 Philippines, 2014 Serbia and Bosnia and Herzegovina) but none of the precedents shown joint deployment of the two modules. Hungarian WP units have been deployed in Sri Lanka (2005), in the Philippines (2013), in Serbia and Bosnia and Herzegovina (2014), with no connection to USAR or other modules, providing drinking water solely to the local population, while unable to make a reliable connection to the USAR modules deployed in the very same time and area.

The main objectives of EUrban Water Aid are:

- 1) Improve civil protection preparedness and response to flood related disasters
- 2) Work out a cooperation framework between the WASH (Water, Sanitation and Hygiene) sector and civil protection in emergencies that is practical and exportable to transnational and international levels
- 3) Test the activation of the EU Civil Protection Mechanism and its tools according to a disaster scenario on large flood on the river Tisza
- 4) Test the implementation of the Host Nation Support in case of disaster exercise
- 5) To promulgate the use of GIS based risk assessment at the planning and intervention phase of disasters
- 6) Improve the efficiency of professional and volunteer rescue teams and water purification modules in civil protection assistance interventions [5].

4. DISCUSSION

Workshop 1 – Basis of cooperation between EU CP modules in emergencies

The workgroups were reviewing and discussing the same issues independently on the basis of distinct aspects. After the workgroups were established, the current means of cooperation between the professional disaster management authorities and non-professional actors were presented and the workgroups carried out the mapping of inter-modular cooperation possibilities within the framework of the EU Civil Protection Mechanism.

SWOT Analysis of Capacities of modules	Help to reach the goals	Blocking to reach the goals
Internal factors	Strengths -Modern equipments -Experineced staff -Motivation to help	Weaknesses -Not trained stuff -Different working methods -Common language
External factors	Opportunities -Close allocations -International agreements -Host nation support	Threats -Local threaten -Budget problems -Lack of information

4. Picture: SWOT Analysis of Capacities of civil protection modules, Result of 2nd Workshop, Created: Ltc Laszlo Gyenge

Workshop 2 – Presenting the capacities of WP and USAR modules

The workgroups carried out the SWOT analysis of the modules and capacities of the participating partners based on their own point of view. They identified the challenges of the joint application of the WP, HCP and USAR modules, especially the external parameters of the operation support units (e.g. transport, compaction, and standardisation options).

Workshop 3 – Harmonisation of WP and USAR in action with host nation support

Then the workgroups - according to their own aspect - put together the joint pre-deployment checklist of the modules, adapting to the INSARAG Guidelines and to the use of the Host Nation's Support (HNS) guidelines. The checklist contained the information required for the application of WP modules, such as locating raw water sources and measuring the quality of the raw water, number of people affected, possible installation sites, characteristics of local infrastructure and info on how to connect to them, fuel procurement opportunities, etc.

Conducting the Table Top Exercise

The TTX exercise simulated the activation of the EUCP Mechanism, the alerting and mobilisation of modules and rescue units offered by Participation States (PS), and their deployment and activities in the affected area. Procedures of the participating organizations were tested (alerting, mobilization, travel, border crossing, HNS, command and control, demobilization), the developed GIS application and its analysis tools and other communication systems were used, and the existing conditions of alert and mobilization system were tested.

Evaluation framework

A team of independent and skilled experts were selected to do the evaluation during the exercise. The method of evaluation was agreed upon before the TTX, and the members of the evaluation team were trained about these methods. Every project partner delegated an expert to the evaluation team. The evaluation team oversaw the table-top exercise, and made a hot-wash for the participants after the TTX, and will make a joint report and present it at the project closing meeting; this report will be disseminated to the Partner States.

5. CONCLUSION

The project was planned to execute by partners from other countries with different working backgrounds. During the project the planned partners took part and executed the undertaken tasks. No new expectations appeared and no new challenges came into the picture.

According to the present situation, the planned tasks were executed. The partners know their role, and executed the table top exercise. The partners got to know each other and each other's capacities. The partners have some knowledge about the other's way of working and working methods. The development of the scenario of the field exercise to be held in April, 2017 is under way, it will incorporate the request from the different partners and modules to provide the best training opportunity for them. The present situations meet the requirements of the plans [6].

The modules established (teams with equipment) will be implemented according to the guidelines on civil protection modules and based on the best practices and lessons learnt. They will work following standard operating procedures established according to the EU Guideline for Standard Operating Procedures and with the help of host nation support protocols established according to the EU Guidelines on Host Nation Support. In order to make the modules operational, specialized staff of relevant profile will be involved and provided with specific training. The regional field exercise to be organized under the programme is meant to test the quality of the modules established and try their operability, efficiency in a real life situation.

Result of this project will be based on a roadmap for future action in the area of disaster risk management in the target region, with focus on cooperation of flood risk management and water purification and aspects with a multi-beneficiary dimension, which is going to be produced under the project.

6. REFERENCES

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