



**MUHA**



## D.T2.2.2 PARTNER - SPECIFIC PILOT ACTION DOCUMENTATION

### KAMNIK PILOT ACTION AREA

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## 1. Introduction

The Interreg Adrion MUHA project is based on the recognised need to improve the resilience of drinking water supply systems to different events (pollutant spills, floods, droughts, earthquakes) by introducing standard procedures and tools for resilience analysis and by putting in place effective response mechanisms for water system managers and protection, rescue and assistance forces. This is balanced between (1) analysing the vulnerability (resilience) of the drinking water supply to these factors, and (2) responding to the event, where the procedures and tools for the response itself will be upgraded alongside the joint development of standard scenarios.

In this context, the experience and guidelines in the field of disaster response (Sendai Framework, ICS, CAP Joint Information Protocols) will be innovatively linked to the field of drinking water supply.

## 2. Pilot action activities

In order to achieve the desired goals, it is also necessary to purchase specific equipment and carry out certain project tasks. Within the scope of the tasks, the Municipality of Kamnik has so far carried out the procurement of communication equipment for the Headquarters Room and 2 other project tasks.




Item No.	1
Title	Communication equipment for the Headquarters Room
Aim & description	<p>The headquarters room at the Municipal Civil Protection Headquarters will now be able to seamlessly carry out the intervention management functions of the ICS (Intervention Command System), while the location and its connectivity to the 112 Operations Centre and the local call centre will allow the IPS management system to be closely integrated with the other functions of the intervention units. The communication equipment installed in the headquarters room is already designed to support the ICS intervention management functions: logistics, planning and administration - finance.</p> <p>In addition to these main support components, the management of the intervention is also supported by properly arranged communication systems as parallel support processes (installed communication equipment, the so-called dispatching system) and, above all, by effective interaction with the various functional subsystems in society, represented by the various operational units of the subsystems in the form of utilities, such as: electricity supply, drinking water supply, maintenance of roads and public areas, and a number of other services.</p>
Activities performed	Tendering finished, equipment installed.
Activities planned	Organization of table-top exercise in Kamnik pilot action area.



Cost (full cost / paid / to be paid)	67.368,34 EUR / 67.368,34 / 0 EUR
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Headquarters room	
Smart TV	
Computer / laptop for headquarters room	
Plotter	



<p>Printer</p>	
<p>Smart board</p>	
<p>Handheld radio, kpl with charger</p>	



<p>Dispatching terminal with complete operating equipment</p>			
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Item No.	2
Title	Analysis of past hazardous(risk) events on water supply systems in Slovenia
Aim & description	<p>The task of creating a web-based infrastructure for the establishment of a reporting system for capturing data on incidents and accidents in water supply systems in Slovenia has also been completed. The reporting system covers the following reporting sources: (a) person or (b) institution and the use of the classification of triggers of events on water supply systems, the use of the classification of components of the water supply system, the use of the classification of hazardous events and the classification of the impact on users. The reporting system also includes mechanisms for the secure storage of submitted reports and mechanisms for basic analytics of submitted reports, including a review by source of coverage (personal, institutional), date of reporting and priority of reporting.</p>
Activities performed	Tendering for the external expert, activity finished.
Activities planned	Reporting system will be integrated in MUHA toolbox - WHO modul 11.
Cost (full cost / paid / to be paid)	8.680,00 EUR / 8.680,00 EUR / 0 EUR

Item No.	3
Title	Hydraulic model of the Kamnik Water supply system and scenario analysis
Aim & description	<p>In line with the MUHA project tasks, a tendering for a Hydraulic Model for the Kamnik Water Supply Network was prepared. The hydraulic model was commissioned by the Municipality of Kamnik to assist in the development of a safety plan for drinking water. The scope of work is divided into two sets of activities. The first set of activities has already been implemented and consists of the preparation and completion of a GIS database that will enable the production of a high quality hydraulic model of the water supply network. The second set of activities is currently under implementation and consists of the actual construction of the hydraulic model of the existing and foreseen situation with the interpretation of the results. The second part of the work also includes the coarse calibration of the model with the available results of the flow measurements in the water supply network.</p>



Activities performed	The first set of activities has already been implemented and consists of the preparation and completion of a GIS database that will enable the production of a high quality hydraulic model of the water supply network.
Activities planned	The second set of activities is currently under implementation and consists of the actual construction of the hydraulic model of the existing and foreseen situation with the interpretation of the results. The second part of the work also includes the coarse calibration of the model with the available results of the flow measurements in the water supply network.
Cost (full cost / paid / to be paid)	29.500,00 EUR / 5.900,01 EUR / 23.599,99 EUR

Within the scope of the tasks, the University of Ljubljana has so far carried out the procurement of server for DSS - WASPP toolbox, Hugin Expert, flow meters and is in process of purchasing the fluorometer.

Item No.	4
Title	Server
Aim & description	The equipment was bought in order to have DSS web tool development environment (WASPP). Server is already set up and is used for running the DSS WASPP toolbox and UNAS forum.
Activities performed	At the moment server is used for development of the draft version of the DSS WASPP toolbox and UNAS forum.
Activities planned	Performing the upgrades of the MUHA toolbox.
Cost (full cost / paid / to be paid)	4.975,07 EUR / 4.975,07 EUR / 0 EUR

Item No.	5
Title	HuginExpert
Aim & description	Software needed for the management of probabilistic events. HUGIN is powerful analytic software for developing and deploying decision support systems for reasoning and decision making under uncertainty. HUGIN software is based on Bayesian network and influence diagram technology and is the ideal choice when you need to solve complex risk and decision problems, and must factor uncertainty into your decision-making.
Activities performed	Tendering for the software is finished.
Activities planned	The software will be integrated into the MUHA DSS toolbox.
Cost (full cost / paid / to be paid)	6.350,00 EUR + VAT / 6.350,00 EUR + VAT / 0 EUR





Item No.	6
Title	Flow meters
Aim & description	Equipment needed for improvement of the monitoring network of the municipality Kamnik.
Activities performed	Tendering for the equipment is finished.
Activities planned	Performing the monitoring of the water supply system of municipality of Kamnik. Activity will start in next few weeks.
Cost (full cost / paid / to be paid)	6.350,00 EUR + VAT / 6.350,00 EUR + VAT / 0 EUR

Item No.	7
Title	Fluorometer
Aim & description	Fluorometer is a device used to measure parameters of visible spectrum fluorescence for detecting artificial tracers, such as Na-fluorescein (Uranine). Artificial tracer Uranine will be used for determination of the drinking water recharge area, which is very important for identifying risks and designing measures for the drinking water source.
Activities performed	Tendering for the equipment
Activities planned	Performing the tracer test in the recharge area in autumn
Cost (full cost / paid / to be paid)	7.000 EUR / 0 / 7.000 EUR