READINESS – TF1

Thematic enhancement and adaptation reports

Detailed Pilot methodologies for enhanced Civil protection advanced training

The consistency analysis done by each partner on his surveyed capitalizing HOLISTIC outcomes and best practices and proposition of some enhancement or adaptation measures considered essential for their capitalisation has identified a benchmark methodology for the execution of pilot projects.

The intention of trainings is improvement, promotion and strengthening the use of infrastructure in fire surveillance and forest fire detection, mainly outputs of Holistic Project (AdriaFireGIS AdriaFirePropagator, GPS tracking systems,..) to strengthen the readiness of Civil protection units and volunteers in order to improve prevention and mitigation of forest fire risks and to reduce the causes of potential start of fire breakdowns as well as seismic hazards.

TF members made an in depth analyse of previous experiences, exchanged know- how and from common basis of knowledge and experience proposed individual solutions that are tailored to the specific needs of their territories.

Project targets

12 advanced training courses

5 local fire exercise

3 local earthquake and wildfire combined drills

2 cross border combined simulation drill

Target groups:

90 Civil Protection Operators

90 Volunteers

Share of target deliverables among the partners

PP	advanced training coures	local fire exercise	local earthquake and wildfire combined drills	cross border combined simulation drill
LP	2	1	1	
PP1	2	1	1	1
PP2	3 1 seizmic	3		
PP3	2	1	1	
PP5	2+1	1		1
PP6	1 seizmic	1	1	
Total	14	8	4	2
Delivery target	12	5	3	2

Partner's abstracts about planned Civil Protection Advanced Training

LP- MOLISE REGION

Type of training

The certification of competences must aim at overcoming the widespread concept of stable and manual knowledge. In the civil protection sector, teaching must necessarily set itself the goal of being active, that means that the learned knowledge must become an operational resource immediately.

From these two basic concepts originates the project idea of organizing a high level training course for categories C and D of the Regional Civil Protection Service and tutoring, aimed at the certification of trainers who will export their knowledge (cultural background) to volunteers, citizens, bodies of the civil protection system on predictable and climatological natural risks and, more specifically, on seismic risk and forest fires. This will be followed by a basic course for volunteers conducted by the trainers as a final test of the training.

Description of structure of training

The advanced training will include three steps:

1) Highly specialized frontal training on the theory of natural hazards and more specifically on seismic risk and forest fires, as well as training on communication techniques and institutional communication in emergency:

- To know the basic theoretical and normative references of the civil protection system and natural risks
- To develop the ability to design educational paths functional to the pursuit of skills
- To develop the ability to work in a team
- To develop the ability to transfer information
- To reflect on the evaluation activities useful to identify the acquisition of skills, for an informed certification of the same
- To define training courses (basic level, advanced level), with related programs and topics, replicable by trained personnel
- To share good practices
- To learn the typical and specialized communication skills of institutional communication in an emergency
- Tutoring activities for the design and implementation of a course addressed to civil protection volunteers (basic level)
- The civil protection system
- Natural risks
- Tutoring activities for the design and implementation of an exercise for civil protection volunteers (basic level)
- Forest fires: active struggle
- Seismic: preparation of fields, management of canteens, preparation of tents, etc.

Objectives

- To improve the response to the emergency
- To train volunteers from the regional PC system
- To inform citizens, improving resilience
- To create a training center for the regional civil protection
- To create standardized "pocket" courses for volunteers, local administrators and operational staff on the topics of seismic risk and forest fires (Basic level, Advanced level)

Professionalism, techniques, tools

The proposed activity will be developed taking into account both the use of innovative training techniques and multimedia communication technologies, as well as innovative methods for assessing trained personnel.

The teaching staff will necessarily have to be trained by experts in the field who can guarantee a high professional level, as well as certified experience on the topics covered by the training (climate - earthquake - fires - new technologies, training, communication).

In addition, at the end of the training path addressed to categories C and D of the Regional Civil Protection Service, It is planned to complete a training program for Civil Protection Volunteers (Basic Course), whose teachers will be the categories C and D of the Regional Civil Protection Service previously trained.

In this phase, a tutoring activity is required both in the exercise planning activities and during the exercise, supporting the participants in the high-level training path.

The Molise Region will coordinate the entire educational and training activity through the Cooperation Service (administrative activity) and the Civil Protection Service (logistics and exercises).

The provider of the "high education and tutoring training" service must guarantee the formal recognition of the training course, in order to make the Civil Protection Operators trained independent, through the regional reference structure (Civil Protection Service), in organizing, independently, subsequent training courses basic and / or advanced level.

Hypothesis of the training program

- Regulations/laws
  - Code of the Civil Protection
  - Rules on the third sector
- Climate risk
  - General notions of applied climatology
  - Molise and climate risk
  - Legislation in the field
- Forest fire risk
  - Legislation in the field
  - General notions on AIB planning and forecast products
  - Molise and the risk of forest fires
- Seismic risk
  - Legislation in the field
  - General notions on the seismic risk
  - Molise and the seismic risk
- Training and communication techniques

- Institutional communication to face an emergency
- Responsibility and Design of Civil Protection exercises

At the end of all the training activities, both of the advanced level and of the basic course for volunteers, the assessment of the formats by the teaching staff will take place.

Gant

Activity	Month	1 month				2 month				3 month				4 month				5 month				6 month			
	Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CSA drafting																									
Execution of administrative activities																									
Realization of multimedia training pole																									
HT course																									
Design exercises																									
Tutoring for the design of exercises																									
VBC organization																									
Tutoring for the organization of the VBC																									
Realization of the VBC																									
Tutoring of the VBC																									
Design of a VBC exercise																									
Evaluation of trainers																									
Delivery of certificates																									
Administrative closure of the activity																									

HT – High Training

VBC – Volunteer Basic Course

n° of Civil Protection units/volunteers involved

n° 15 Civil Protection Units involved

n° 15 Volunteers involved

Equipment used:

to be defined

PP 1- DUBROVNIK NERETVA REGION

Abstract about civil protection advanced training

The DNR plans to organize civil protection, advanced training in order to improve the preparedness of the civil protection forces in case of earthquake or wildfires – two risks which endanger almost every part of DNR. These risks are declared as one of the most significant in the DNR's Risk Assessment, prepared by the professionals and voted by the Region's Assembly. The planed exercises are supposed to be organized in the territory which had been hit by heavy earthquakes and wildfire in the past which will create almost real terrain conditions. Timeframe of the exercises will be provisional.

Equipment

During the exercise equipment procured during implementation of the HOLISTC project will be used: drones, video surveillance system installed in three most endangered areas of the DNR territory, software and firefighting equipment for personal and general use. Special equipment for the interventions in case of earthquake, stabilization of damaged buildings as well as salvation from the ruins will be procured for the organization of the combined earthquake and wildfire exercise. After the exercise an exhibition of the special firefighting and other civil protection equipment is planned which fulfills the TF 3 goals.

Preliminary information on procedures

DNR will achieve the activities planned in the AF; organization of two advanced courses, one wildfire and one combined earthquake and wildfire combined exercise. One of the planned course will be organized as special training with the final exam and exercise necessary for the promotion of the firefighters to firefighting officers. The other training will be organized for civil protection, mainly members of the voluntary firefighting forces. They will be educated for handling with various hydraulic tools necessary for the interventions in case of earthquake and heavy traffic accidents.

Estimated cost for civil protection advanced training

The estimated costs are supposed to cover the procurement of the equipment which is supposed to be used during the exercises as well as external experts, licensed trainers who will organize advanced trainings. All of the planned costs are subject to market research and public procurement, but here are the estimated costs:

- Equipment: 35000 EUR
- External expertise: 20000 EUR.

PP 2- MARCHE REGION

Type of training

Advanced courses for Civil protection operators and volunteers with aims at improving the readiness of Civil Protection units to react promptly an efficiently during and after forest fires and earthquakes outbreaks.

Courses will consist of:

1) n°3 advanced training course for forest fire fighting addressed to Civil protection volunteers and n°3 local fire-fighting exercises
2) n°1 training course for Civil Protection volunteer on seismic risk

Description of structure of training

1) Advanced training courses for Civil protection operators and volunteers – forest fire fighting

(Civil Protection Volunteers, Civil Protection operators and Instructors)

The objective of the training is to prepare Civil Protection volunteers for forest fire sighting, extinguishing and recovery operation.

The training will focus on: notions on health and safety according to the italian D.Lgs 81/2008; Type of forest fire; Type of forest (description of three types of forest); Use of equipment for fighting forest fires and PPE (Personal Protective Equipment); Type of fire; Methods of intervention; Type of accident following shut-down operations

Training will take place on 26th and 27th May in Fano, Fabriano and S. Elpidio a Mare Municipalities.

Local fire exercise

The fire fighting excercise will take place on 9th and 10th June in Fermignano, Fabriano and Venarotta Municipalities and will consist of:

- Initial inspection to identify the types of forest present
- Exercise of a simulation of a forest fire and intervention of volunteers to extinguish the fire front
- On-site inspection of burnt area.

2) Training course for Civil Protection volunteer on seismic risk

Experimental training and seismic risk education campaign for voluntary associations.

An experimental training course for operators of one or more municipal groups/voluntary associations of civil protection will be carried out, aimed at specific training on seismic risk and at the codification of a code of conduct in which the volunteer can also assume a new role of local observer. Entry Test was realized the 21st of June, course in October and it had the aim to finalize course programme. A preliminary work café with volunteers was done the 19th of April. A visit to the seismic acquisition data centre (INGV location) in Ancona will be organized too.

n° of Civil Protection units/volunteers involved in both events

- n° 2 Civil Protection Operators involved in the forest fire courses
- n° 3 Instructors

- n° 90 Civil Protection Volunteers that will participate to the advanced training course for forest fire fighting and related exercises

- 4 Civil Protection Operators involved in the seismic training course
- n° 30 Civil Protection Volunteers that will participate to the seismic training course
- 4 INGV (Istituto Nazionale di Geofisica e Vulcanologia) teachers

Equipment used:

- Forest fire fighting modules on off-road vehicles
- PPE equipment for civil protection volunteers and officers

PP 3- SPLIT DALMATIA COUNTY

Type of training

Advanced courses for Civil protection operators and volunteers with aims at improving the readiness of Civil Protection units to react promptly an efficiently in order to avoid huge human, animal, infrastructure and agricultural losses before, during and after forest fires and earthquakes outbreaks.

Description of structure of training

Advanced Training Campaign for Civil Protection units and volunteers to train and skill them in the use of the fire simulation system (Adria Fire Propagator), video based surveillance system (AdriaFireMonitor), fire analysis & risk modelling system (Adria Fire GIS) during the fire fighting intervention, by implementation of training courses, exercises, drills and simulations supported by manuals, best practices, operational plans and tools capitalized by HOLISTIC project.

n° of training exercises that will be conducted

- n° 1 Pilot Deployment of Civil Protection Advanced Training that consists of 6 regional pilot deployment in the partner territories, aiming at training Civil Protection Operators and Volunteers
- n° 12 advanced training courses for Civil protection operators and volunteers
- n° 5 local fire exercises

- n° 3 local earthquake and wild fire combined drills
- n° 2 cross border combined simulation/drill

Type & structure of exercises that will be conducted

- Seminar of Civil Protection Units
- Training of the civil protection forces in case of heavy earthquake
- Civil protection volunteers training course, exercise
- Local earthquake, wild fire drills
- Meeting, practical exercitations and workshops
- Training course (fire on boat)

n° of Civil Protection units/volunteers involved

- n° 90 Civil Protection Operators
- n° 90 Volunteers that will participate

Equipment used:

- Fire Command Mobile Center with proprietary software and equipment
- Tablets with proprietary software for tough field use GPS tracking system for better coordination
- Drones with normal and infra-red cameras
- Adria Fire Propagator
- Adria Fire Monitor
- Adria Fire GIS

PP 5- FRIULI VENEZIA GIULIA

Type of training

Advanced courses for Civil protection operators and volunteers with aims at improving the readiness of Civil Protection units to react promptly an efficiently before, during and after forest fires and earthquakes outbreaks. Training will consist of advanced training courses, a local fire exercises, a cross border combined drill and a training seminar for public officers and administrators.

Description of structure of training

A) Wild Fire Forest

One training module for of PC operators, Forest Corps, VVF and Volunteers, addressed to train and update the DOS (Director of Fire Extinguishing Operations), who coordinates the activities on forest fires, about communications between S.O.R. and AIB groups on the ground, air vehicles, through a specific software 3D simulation system able to reproduce real operative conditions where operators with a trainer may learn how speed up and optimize shutdown interventions improving coordination of air and ground forces to reduce fire damages. For this specific training activity PC FVG plans to adapt and update the software system already supplied some years ago.

A second training module will be proposed for Operative room operators for the interpretation of images and data collected by webcams and thermal cameras.

During a local fire exercise will be tested the HOLISTIC applications of a drone for support in firefighting activities.

B) Earthquake Hazard

Training about seismic post-earthquake management for PC Operators, regional officers, firefighters, volunteers and public decision-makers.

For these training activities, we intend to use and further develop the tools developed in previous phases of the READINESS project and within the Holistic project about SPBs seismic monitoring, integrated with those carried out by PC FVG as a result of operational Protocols with the Universities of Udine and National Fire Brigade (SERM Academy) and the experiences gained following the recent earthquake catastrophes that hit Central Italy.

A training seminar will be addressed to public officers and administrators to address the administrative aspects of seismic emergency management

Training of operators to the use of new quick survey tools will be addressed to the practical application in a combined exercise.

C) ITA - CRO joint seismic and fire exercise in FVG.

A joint ITA-CRO seismic and fire exercises in FVG will be carried out in the seismic training area of "Portis Vecchia" village, related to seismic risk assessment and procedures to check and detect the real building status. The exercise area is an old village, remained in the same conditions, caused by the '76 earthquake. Between the different buildings can be carried out activities of detection, observation and damage assessment and analysis of the different operational strategies to be adopted in such situations.

Other specific training courses on wild fire will be held at the Regional Operational Room for the training of CP, CFR and firefighter operators using visualization tools for monitoring with new panoramic and thermal webcams.

Objectives

To Improve Professionalism, Techniques and Tools used by PC Operators, Public Administrators and Voluntaries in fire and seismic emergency situations.

n° of training exercises that will be conducted

- n° 2 advanced training courses
- n° 1 local fire exercises
- n° 1 joint ITA-CRO combined drill in seismic training area of Portis Vecchia (UD)
- n° 1 training seminar for public officers and administrators

Type & structure of exercises that will be conducted

- Advanced and training courses for Civil protection Operators and Volunteers
- Local fire exercises for PC operators, Forest Corps, Fire Brigades and Volunteers
- Joint ITA-CRO combined drill
- Training seminar for public officers and Administrators

n° of Civil Protection units/volunteers involved

- n° 20 Civil Protection Operators
- n° 20 CFR/Volunteers will participate

Equipment used:

- Tablets with proprietary software for heavy duty use
- Drone with normal and infra-red cameras
- Fire management 3D simulator system
- Fixed normal and infra-red webcameras

PP 6- ZADAR COUNTY

Type of training

Advanced courses for Civil protection operators and volunteers with aims at improving the readiness of Civil Protection units to react promptly an efficiently in order to avoid huge human, animal, infrastructure and agricultural losses before, during and after forest fires and earthquakes outbreaks.

Courses will consist of:

1) n° 1 advanced training courses for Civil protection operators and volunteers

2) n° 1 local fire exercises

3) n° 1 local earthquake and wild fire combined drills

Description of structure of training

Advanced training courses for Civil protection operators and volunteers

Local Fire Departments, County Fire Association, County Fire Operation Center and other stakeholders will be trained and skilled for the firefighting intervention, by implementation of training courses, exercises, drills and simulations supported by manuals, best practices, operational plans and tools capitalized by HOLISTIC project. Details still need to be defined.

Local fire exercise

Exercise will simulate an open fire, which will be detected by video surveillance system for early detection alarming the operation center which will dispatch a field unit for fast intervention.

Local earthquake and wild fire combined drills

All Civil Protection units working together in order to save people and property from an object heavily hit by an earthquake in which subsequently fire was started. This will test the operations, coordination and logistics of everyone involved to straighten the cooperation and test new tools in disaster rescue operations.

n° of Civil Protection units/volunteers involved

- To be defined

Equipment used:

- To be defined