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## Emerging technologies for the early location of Entrapped victims under Collapsed Structures & Advanced Wearables for risk assessment and First Responders Safety in SAR operations

### D2.5 – Citizens and volunteer organisations involvement in Crisis Management

**Work package:** WP2 – Societal Aspects of S&R

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## Search and Rescue Project Profile

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## **Executive Summary**

This deliverable focuses on Citizens and volunteer organisations involvement in Crisis Management and how they deal with the fact that during a disaster situation, many volunteers want to help. These voluntary work forces have to be registered and applied in accordance with regular staff members and relief units. In addition, for an efficient and fast resource and mission planning there is the need for precise and resilient data of the affected area.

It investigates the processes, procedures and communication framework to involve volunteer organisations (e.g., doctors, paramedics, volunteer groups etc.). It also considers the use of mobile applications, social media and other software which enables an efficient management of volunteers.

Management and application volunteers together with regular staff and relief units, mission and resource planning, validity checks for every case of assistance, requirements for volunteer deployment (such as insurance, food, accommodation, responsibilities, special abilities of a volunteer (Driver, diver, crane operator) and deployment limitations (e.g., max work hours or heavy gear for a particular task) are also considered.

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## List of Abbreviations

Abbreviation	Explanation
AERVCP	Archive of Evaluation Reports of Voluntary Civil Protection Organizations
ASA	Aid and Support
CSA	ComSupport Action
CPV	Civil Protection Volunteer
FAA	First Aid Action
FFA	Forest Firefighting Action
NACP	National Authority of Civil Protection
PSA	Psychological Support Action
PAA	Public Awareness Action
ReSA	Relief and Support Action
RVCPO	Register of Voluntary Civil Protection Organizations
RCPV	Register of Civil Protection Volunteers
REMVCP	Register of Equipment and Means of Voluntary Civil Protection Organizations
RCOB	Register of Collaborating Organizations and Bodies
SMA	Shelter Monitoring Action
S&R	Search & Rescue
TRAct	Transportation Action
UFA	Urban Firefighting Action
URVCP	Unified Register of Voluntary Civil Protection
VCPO	Voluntary Civil Protection Organization

## List of Definitions

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For the purposes of T2.5 (Involvement of volunteer organisations / citizens), the following definitions apply:

1. Hazard: A potentially catastrophic event, phenomenon, or human activity that could result in loss of life or injury, property damage, social and economic disturbance, or environmental degradation.
2. Vulnerability: Conditions determined by physical, social, economic and environmental factors or processes that increase a society's vulnerability to the effects of risk.
3. Susceptibility: The factors that create the conditions for the development of a risk to disaster.
4. Resilience: The ability of a system or society potentially exposed to potential dangers, to resist or adapt, in order to maintain an acceptable level of functioning and cohesion.
5. Disaster: The serious disruption of the functioning of society, which causes extensive human, material and environmental losses, which exceed the ability of the affected society to deal with them with its own means and resources.
6. Early Warning: The provision of early warning and adequate information, through the competent bodies, which enables the launch of specific actions to avoid or reduce the impact of the risk and prepare for effective response.
7. Coordination: The organization, prioritization and monitoring of the required actions, as well as ensuring interoperability, implementation of the rules of operational action and cooperation between the stakeholders to achieve a common goal.
8. Prevention: The set of actions and measures aimed at the absolute avoidance of the potential effects of hazards and the minimization of natural, technological disasters and other threats.
9. Preparedness: The set of actions and measures taken in advance to ensure an effective response in the event of a disaster.
10. Response: The actions, during or immediately after the disaster, to protect people's lives and health, to address their immediate living needs and to provide relief and support for mitigating the effects of the disaster.
11. Short-term Relief: The actions after a disaster aimed at restoring or improving living conditions in the first hours and days after its onset.
12. Disaster Management Cycle: The set of tactical and management decisions and operational activities at all stages and phases of the disaster cycle (prevention, preparedness, response and recovery).
13. Evacuation: The actions for the preventive evacuation of citizens who are at risk due to their stay near an area threatened by a catastrophic phenomenon that is underway.
14. First Responders: Those who have the jurisdiction and the technical expertise to be the first ones to deal with the catastrophic or emergency event.

15. Civil Protection Experts: The scientific specialists or certified professionals in matters related to disaster management and response and the assessment of critical factors, such as risk, vulnerability and exposure at risk.
16. Emergency: The sudden and unpredictable threatening situation that requires immediate action to minimize its adverse consequences.
17. National Hazard Mitigation Policy: The action plan that sets out at national level the final and intermediate targets for disaster risk reduction, as well as the corresponding evaluation indicators and timelines. It includes all the necessary actions, procedures and programs related to all phases of the disaster cycle and in particular the prevention, preparedness, response, rehabilitation, as well as the feedback of the planning at local and national level to reduce the risk and strengthen the resilience.
18. Risk: The potential human, material or environmental losses over a specified period of time, which result by the combination of hazards, vulnerabilities and inadequacy of skills or appropriate measures to reduce the potential adverse effects.
19. Civil Protection Volunteer (C.P.V.): The natural person - member of a voluntary civil protection organization, which is part of the Civil Protection staff and provides, in cooperation with Local Government and other operational bodies, non-profit (unpaid) service for the benefit of the social of the whole.
20. Voluntary Civil Protection Organization (V.C.P.O.): Legal entities or associations or groups of natural persons, which are part of the Civil Protection staff and in cooperation with Local Government bodies and other operational bodies are active in providing non-profit (unpaid) services for the benefit of society as a whole.
21. Unified Register of Voluntary Civil Protection (U.R.V.C.P.): Register, which is kept by the Directorate of Volunteering and Education of the National Authority of Civil Protection and includes:
  - a) Register of Voluntary Civil Protection Organizations (R.V.C.P.O.), in which the Voluntary Civil Protection Organizations are registered.
  - b) Register of Civil Protection Volunteers (R.C.P.V.), in which are registered the members of the Voluntary Civil Protection organizations.
  - c) Register of Equipment and Means of Voluntary Civil Protection Organizations (R.E.M.V.C.P.O.), in which materials and means of the voluntary organizations of Civil Protection are registered.
  - d) Register of Collaborating Organizations and Bodies (R.C.O.B.), in which the Organizations and Bodies whose actions are in line with the purposes of civil protection are registered.
  - e) Archive of Evaluation Reports of Voluntary Civil Protection Organizations (A.E.R.V.C.P.O.), in which the Evaluation Reports are registered.

# 1 Introduction

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In the following sections, an overview of the purpose and scope of this document is presented. The structure and the relationship to other documents are described, as well as the list of abbreviations used in the current deliverable.

## 1.1 Purpose and scope

The purpose of the present deliverable entitled "Citizens and volunteer organisations involvement in Crisis Management" is to describe the involvement of voluntary civil protection organisations and citizens in crisis management.

Nowadays, given the demands that rise in terms of civil protection, the role of volunteers is more than ever necessary and crucial. It is understood that natural disasters especially in the current climate crisis, could take the form, intensity, extent or duration that make necessary the voluntary assistance to the existing civil protection mechanism. Given that humans are the main recipient of the negative consequences of such disasters, the State must encourage its ability to protect itself and safeguard its security and its' fellow citizens, through the development of voluntary civil protection.

According to the above assumption, there is an urgent need to improve and modernize the framework, which is considered insufficient and non-functional, to ensure the effective operational involvement of volunteers in civil protection's actions.

The proper framework should be used for providing adequate training, retraining and evaluation of voluntary Civil Protection organizations and their members. There should be a clear framework that defines the conditions and the way of the volunteers' mobilization and operational engagement, with the result that, as has emerged from the domestic experience, it often happens in a disorderly and uncontrollable way. In addition, it is highly important that the voluntary system could receive proper financial support for renewing their resources and means. Finally, the need for the categorization of voluntary organizations according to their field of specialization should be highlighted.

## **2 Voluntary Civil Protection Organizations**

### **2.1 Mission and action of the Voluntary Civil Protection Organizations**

The mission of the Voluntary Civil Protection Organizations is to help the competent state bodies in the work of protection of life, health, property of citizens, as well as the environment and cultural heritage from threatened or ongoing natural, technological or man-made disasters. and threats, which cause emergencies during peaceful period.

The Voluntary Civil Protection Organizations assist the National Mechanism, act and support the work of the competent Authorities and state services for the fulfilment of their mission, in accordance with the principles of social solidarity.

The Voluntary Civil Protection Organizations support the state bodies in all phases of the disaster cycle, through the following actions:

- a) Operational.
  - b) Support.
1. Operational actions concern:
    - a) Forest protection actions for the prevention of forest fires (Forest Prevention Action-FPA).
    - b) Forest Firefighting Action (FFA).
    - c) Urban Firefighting Action (UFA).
    - d) First aid actions for the implementation of a sequence of actions to prevent the deterioration of the condition of the injured or patients (First Aid Action-FAA).
    - e) Search and Rescue Actions related to the process of locating and helping people who are at risk or threatened by imminent danger (Search and Rescue-S & R) and are divided into: a) urban rescue, b) mountain rescue, c) rescue liquid element and d) cavities. f. Aid and Support Action (ASA) related to a) Releases from road accidents, b) felling of trees, c) water pumping, d) release from elevators, e) road washing, f) removal of objects, g) release of animals.
  2. Support actions concern:
    - a) Telecommunications actions to provide alternatives for the restoration of communications between government agencies, voluntary organizations and between them, in case of emergency, through approved frequencies (ComSupport Action-CSA) in cooperation with the competent operational bodies.
    - b) Psychological Support Actions to support victims, relatives of victims, and first responders (Psychological Support Action-PSA).
    - c) Information and warning actions to provide timely, operational, coordinated and uninterrupted information to citizens in cases of emergency and preventive, indicatively, through the distribution of information material, according to the National Civil Protection Planning (Public Awareness Action-PAA).
    - d) Victim care actions to ensure the basic needs of the victims, such as, by way of example, through the provision of temporary housing and food for the population (Relief and Support Action-ReSA).
    - e) Transport actions for the use of means of transport in civil protection actions, such as, for example, the transport of people and materials (Transportation Action-TRAct).
    - f) Organizing and operating actions of gathering places for the development and

organization of a temporary camp for accommodation and feeding of victims (Shelter Monitoring Action-SMA).

## **2.2 Methodological approach**

Scoping review of the civil protection national system, regarding the contribution of the voluntary force in the action plan that sets out at national level the final and intermediate targets for disaster risk reduction including all the necessary actions, procedures and programs related to all phases of the disaster cycle (prevention, preparedness, response, rehabilitation).

## **2.3 Conditions for inclusion in the Register of Voluntary Civil Protection Organizations**

1. The National Authority of Civil Protection keeps a Register of Voluntary Civil Protection Organizations (R.V.C.P.O.). The membership in the R.V.C.P.O. of Unified Register of Voluntary Civil Protection (U.R.V.C.P.) is made by decision of the Head of the National Authority of Civil Protection, upon request of the voluntary organization and the relevant file of required documents.
2. In the R.V.C.P.O. includes the voluntary organizations of the country that are: (a) non-profit legal entities for the purpose of pursuing civil protection actions; or (b) associations of persons, non-profitmaking, for the purpose of pursuing civil protection actions.
3. For the inclusion of a voluntary organization in the Register of Voluntary Civil Protection Organizations (R.V.C.P.O.) it is required to acquire the status of Civil Protection Volunteer of at least twelve (12) members.
4. The data of the Voluntary Civil Protection Organizations and their trained members, of the collaborating organizations and bodies, as well as their evaluation reports, including the equipment and the means, are registered and kept in the Unified Register of Voluntary Civil Protection (U.R.V.C.P.), which is compiled, maintained and processed by the Independent Directorate of Volunteering and Education of the National Authority of Civil Protection. In the Unified Register of Voluntary Civil Protection (U.R.V.C.P.) classified access to all data is provided to the competent state bodies for information with the aim of, as the case may be, utilization.

## **2.4 Conditions for obtaining and renewing the status of Civil Protection Volunteer**

### **2.4.1 Obtaining the status**

1. Members of voluntary organizations, in order to qualify as a Civil Protection Volunteer, must meet the following conditions:
  - a. Be citizens the country of their stay or citizens of a member state of the European Union with permanent residence in Greece for at least three years or third-country nationals who hold a long-term residence permit.

- b. To speak and write fluently in the county's language.
  - c. Not to be prosecuted and not to have been convicted of crimes that constitutes obstacles to hiring in the State.
  - d. To have completed the eighteenth (18th) year and not to exceed sixty-fifth (65th) of their age, In order to support actions, the above age limit is extended until the seventy (70th) year.
  - e. To have proven good physical and mental health that will be certified after submitting an opinion of good general medical condition, by physicians, cardiologist and psychiatrist, public or private health service provider.
  - f. To have received the required certified training and certification from the School of Volunteers and Voluntary Organizations of the Academy of Civil Protection and the Fire Academy.
  - g. Not to have the status of Volunteer Firefighter of the Fire Brigade.
2. Each volunteer who meets the above conditions is included in the Register of Civil Protection Volunteers (R.C.P.V.) and is assigned an individual, unique Registry number. The civil protection volunteer cannot be a member of more than one voluntary organization of the Register of Voluntary Civil Protection Organizations (R.V.C.P.O) at the same time.

The status of Civil Protection Volunteer is maintained in case of transfer by a volunteer group of the Register of Voluntary Civil Protection Organizations (R.V.C.P.O.) in another, as well as in case the voluntary organization in which the volunteer is a member dissolves or ceases its activities or is deleted from the R.V.C.P.O if it joins, within six months, in another voluntary organization. In any case, the voluntary organization to which the volunteer moves must immediately inform the National Authority of Civil Protection about the relevant transfer.

#### **2.4.2 Renewing the status**

1. In order for the Civil Protection Volunteers to renew their status as Volunteers, they receive every six (6) years from the date of acquisition of their status, with the care of the Directorate of Volunteering and Training of the National Authority of Civil Protection, additional training from the Academy of Civil Protection, in order to update their certificates (re-evaluation).
2. In case of unsuccessful completion of the above additional training, the Civil Protection Volunteers may repeat the process within three (3) months, during which their status is suspended. Failure to do so will result in loss of Civil Protection Volunteer status.
3. Loss of the status of Civil Protection Volunteer occurs after the issuance of a reasoned decision of the Head of the National Authority of Civil Protection, in case they: a) are prosecuted or convicted (legal terms), b) exceed the age of 65 years old, c) have health issues which affect their capabilities and safety.
4. The deletion of the Voluntary Organization results to the loss of the status "Civil Protection Volunteer" of its members.



### **2.4.3 Training of Voluntary Organizations**

1. The Head of the National Authority of Civil Protection has a staff and coordinating role in the training of Civil Protection Volunteers and trains them through the Civil Protection Academy, which may, for educational purposes, conclude memoranda of cooperation, program agreements or contracts with competent public or private institutions, national or supranational, or with other specially authorized or recognized bodies and institutions of higher education, in subjects related to the mission of the Civil Protection.
2. The Directorate of Volunteering and Education of the National Authority of Civil Protection is responsible for informing the Voluntary Organizations about all kinds of educational programs.

### **2.4.4 Mobilization and operational involvement of Volunteers**

1. Those who are included in the Register of Voluntary Civil Protection Organizations (R.V.C.P.O.) of Unified Register of Voluntary Civil Protection (U.R.V.C.P.) voluntary organizations and other collaborating organizations and bodies (Register of Collaborating Organizations and Bodies - R.C.O.B.), with which a memorandum of cooperation has been developed, are mobilized and involved in operation under the orders of the Civil Protection Coordinator (responsible incidental operator), in accordance with their existing and declared operational capabilities in proportion to the emerging operational needs.
2. The Voluntary Organizations are obliged to keep updated information and to inform the locally competent Regional Centres of Civil Protection Operations about their availability to active members and means, as well as any change.
3. The Voluntary Organizations that have direct and continuous operational involvement are mobilized by the Operational Centres of the respective, per action, bodies and simultaneously inform the regional operational centres of Civil Protection.
4. The head of the respective Voluntary Organization bears the sole responsibility a) of staffing and assigning to every volunteer accordingly to his/hers special certified qualifications per action and the suitability, b) of maintaining and properly operating the equipment and means of the Voluntary Organization.

### **2.4.5 Communication framework**

Communication Framework steps for raising volunteer organizations' interest in order to engage:

1. Statement of purpose: It is useful to say up front why a communications strategy is developed and what it tries to achieve. This does not need to be very detailed, it acts as a reference.
2. Current Situation: Demonstrating the current situation in Civil Protection.
3. Objectives: Demonstrating the main objectives of the State for the volunteer organizations' engagement.
4. Identifying the suitable volunteer organizations (target group)
5. Press Releases and Public Relations for communicating the need for the engagement, and the probable opportunities for the volunteers.

## 6. Digital Communication.

## 3 The volunteer and end user app (Volunteer App)

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### 3.1.1 Purpose of the Volunteer App

The primary aim of the volunteer app is to create an organization-based inventory of individual skills and equipment available for the emergency situations by allowing volunteers and/or volunteering organizations to self-register. The volunteer app is composed of two major modules:

1. The volunteer module. This module allows for individuals (volunteers) and volunteer organizations officially registered at the formal registry of volunteer organizations kept under the auspices of the Civil Protection Authority to declare:
  - a. The volunteer organization's name.
  - b. The role of the registered member (i.e. Head; Deputy-Head; Member).
  - c. The EU country the organization is registered in.
  - d. The specific skills the user/organization possesses. These may be:
    - i. Emergency Communications
    - ii. Emergency Medical Help
    - iii. Firefighting
    - iv. First Aid
    - v. Forest Firefighting
    - vi. Forest Patrolling
    - vii. Pilot
    - viii. Psychological First Aid
    - ix. Rope Rescue
    - x. SAR
  - e. The equipment that the volunteer/organization is providing:
    - i. 4WD (4 Wheel Drive)
    - ii. Aeroplane
    - iii. Axe
    - iv. Bolt Cutters
    - v. Chain Saw
    - vi. Communication Radio
    - vii. Cut Off Machine
    - viii. Drone
    - ix. Fire Engine
    - x. Firefighting and SAR Personal Equipment
    - xi. Firefighting Gloves and Clothing
    - xii. Forest Firefighting Helmets
    - xiii. Human Dummies/ Search & Rescue Dummies
    - xiv. Immobilization Board
    - xv. Life-Safety Rope
    - xvi. Medical First Aid
    - xvii. Mini excavator machine
    - xviii. Non-Life-Safety (utility) Rope
    - xix. Pick Up Truck
    - xx. Portable Engine Generator
    - xxi. Portable Fully Equipped Communication Center
    - xxii. Portable Pharmacy
    - xxiii. Portable Professional Pharmacy
    - xxiv. Portable Radios
    - xxv. Professional Ladder
    - xxvi. Sked Stretcher
    - xxvii. Smoke Masks

- xxviii. Steel Bar
  - xxix. Stretcher
  - xxx. Throwline (Accessory Cord)
  - xxxi. Vacuum Stretcher Res-Q-Matt Plus
  - xxxii. Vibration Demolition Hammer
  - xxxiii. Water Tank Truck
  - xxxiv. Work Light Tripods
  - f. Additional contact information.
2. The civilian module. In addition to the volunteer module, a separate module can be used from civilians. This module aims at facilitating guidance for civilians and also for conveying to them useful and important information in relation to dangerous situations in the vicinity of their location.

The aforementioned inventory and application functionality have been established in coordination with first responder organization (i.e. EPAYPS) that possess extensive field experience and are leading this task. The inventory of the total volunteers/first responders and their respective resources are communicated to the Operational Coordination Centre for the Commanding Officer to be aware of the resources that are available on the emergency scene and manage these accordingly. In SnR, this is performed through the Concorde platform UI via messages that are sent to the application.

In addition to the establishment of the organization's participant, skill and resource inventory, the volunteer app also aims at facilitating field coordination of the operating units by establishing a chain of command (i.e. Head, Deputy Head, and member) for participating volunteers and the possibility to indicate through the use of a RED BUTTON as an alert when exposed to a potentially life-threatening situation. Information and simple guidance for civilians by using easy to comprehend messages has already been aforementioned.

### **3.1.2 User and system requirements**

The application is designed so as it can be easily used without requiring substantial knowledge of higher or new technologies from the application user in order to be applicable to as many users as possible. The only requirement for using the application is basic understanding of how smartphones and tablets work. The devices where the application will be tested through are going to be smartphone and/or tablet and/or laptop.

All of the aforementioned devices must have access to 4G/LTE Network or higher or Wi-Fi. Without network access the application will not be able to connect to the Operational Coordination Centre through its backend nor be able to send data from the user's GPS location.

### **3.1.3 Application design and development**

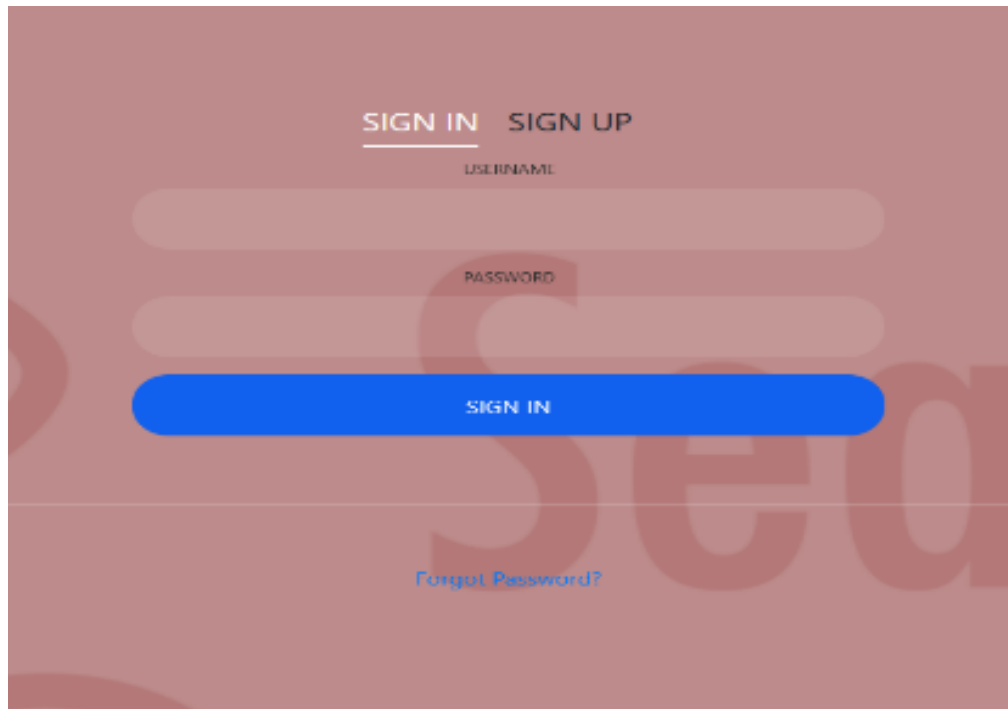
The application's main features are summarized below and subsequently elaborated through the screens that the application offers. The application provides:

- Information concerning each volunteer registered in the application (i.e. type of organization, resources/skills in possession).
- Information and possible relevant routing for the civilian module.
- Specific tables for skills and equipment created for each registered volunteering organization.
- A history table (i.e. logging in, registering etc.) will be created for keeping volunteer logs.

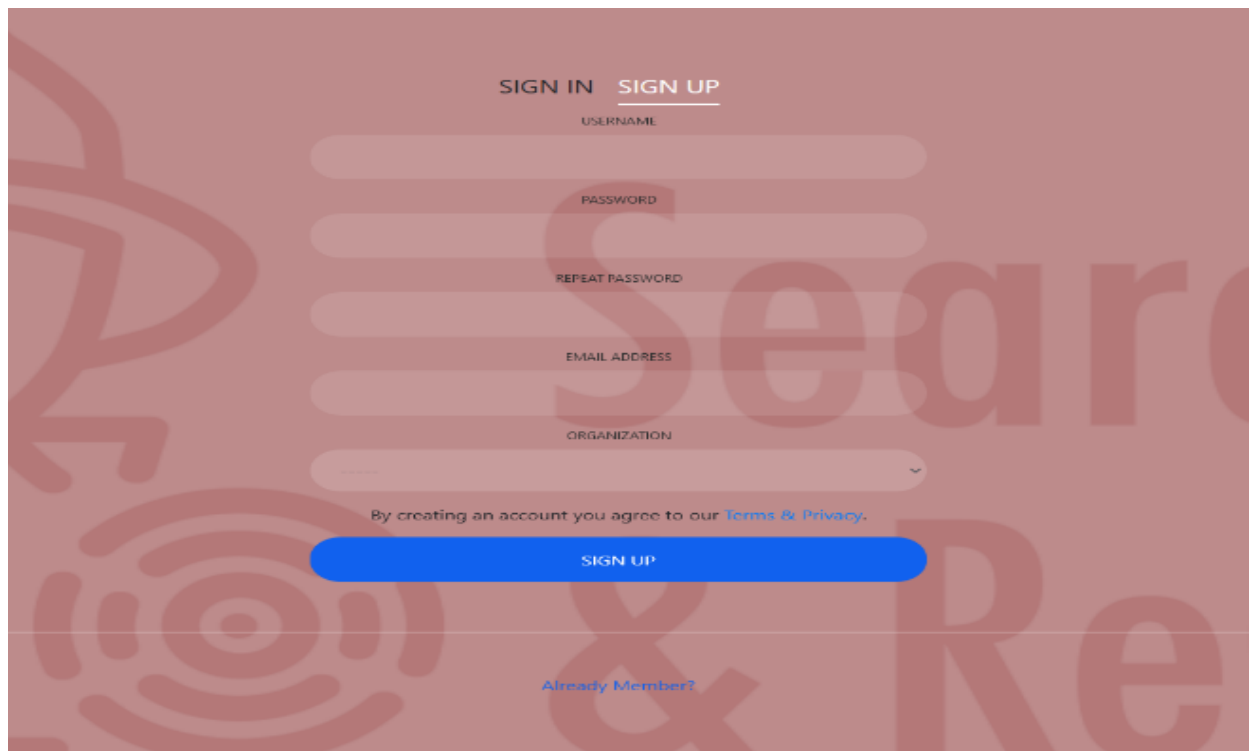
- An alert button (RED BUTTON) has been implemented.

#### 3.1.3.1 Login and Register Page.

In the following images we can see the respective pages for sign in (in case the user has already registered in the app before – see Figure 3-1) and sign up (in case the user has not used the application before – see Figure 3-2).

The image shows a login page with a light red background. At the top, there are two tabs: 'SIGN IN' (which is underlined) and 'SIGN UP'. Below the tabs are two input fields: 'USERNAME' and 'PASSWORD'. A large blue button with the text 'SIGN IN' is centered below the input fields. At the bottom, there is a link that says 'Forgot Password?'.

**Figure 3-1: First page login**

The image shows a registration page with a light red background. At the top, there are two tabs: 'SIGN IN' and 'SIGN UP' (which is underlined). Below the tabs are five input fields: 'USERNAME', 'PASSWORD', 'REPEAT PASSWORD', 'EMAIL ADDRESS', and 'ORGANIZATION'. A large blue button with the text 'SIGN UP' is centered below the input fields. Below the button, there is a line of text: 'By creating an account you agree to our [Terms & Privacy](#).' At the bottom, there is a link that says 'Already Member?'.

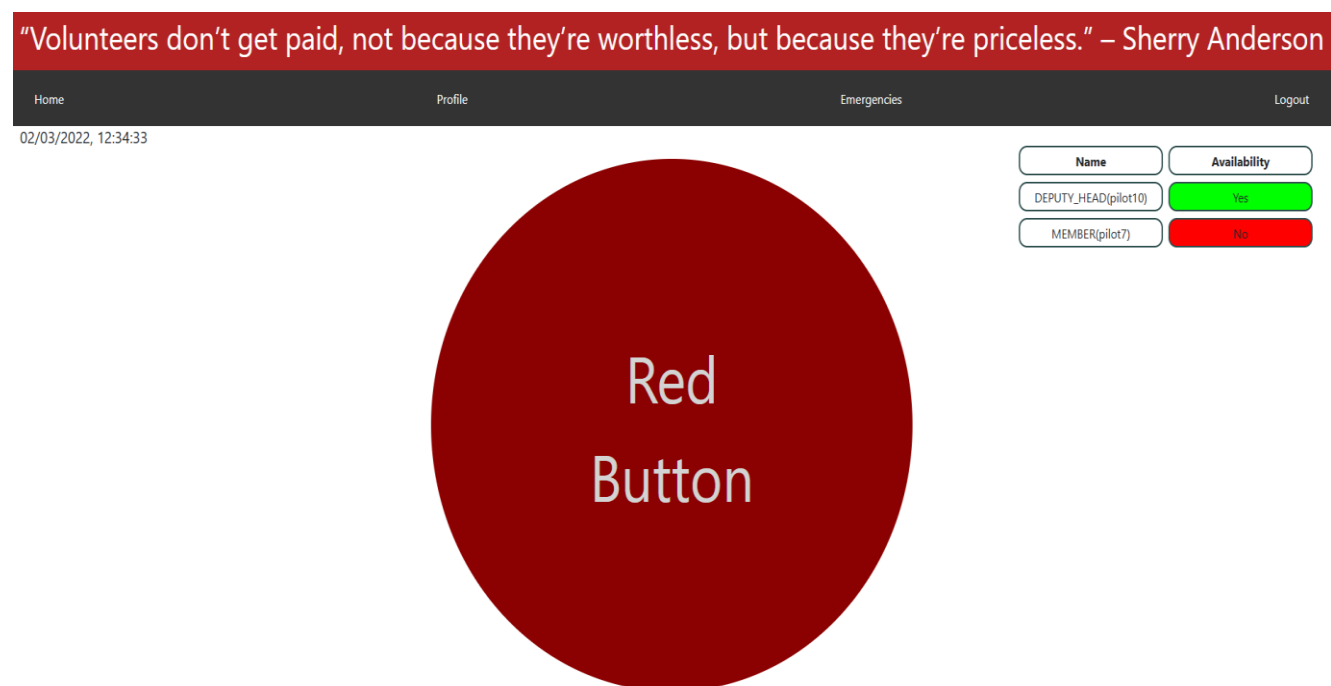
**Figure 3-2: Registration display**

After filling in the sign up information a window pops up a formal declaration (legal), where volunteers must confirm the authenticity of their personal information and certified field of expertise/hard skills. In case they do not confirm, the registration process is cancelled. An example of the formal declaration could be: "I / We hereby confirm that the information provided herein is accurate, correct and complete and genuine. I / We request my / our information to be handled In accordance with section 3 of D10.6 – "Ethical Protocol" of this Research Program"

Following the login, the application offers three (3) distinct screens (i.e. Home; Profile; Emergencies), starting by the home page where the user is directed as described below:

### 3.1.3.2 Volunteer module home page:

In the main page of the app the user can see the "Red Button", which is an alert button in case the volunteer using the application is in danger (see Figure 3-3).

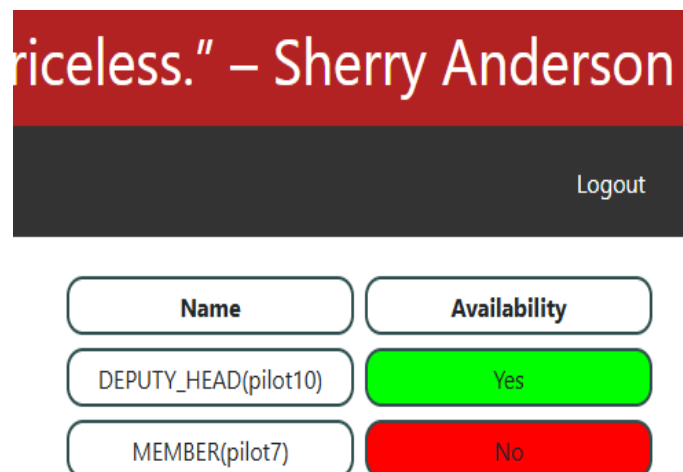


**Figure 3-3: Home page Red Button**

When the Red Button is clicked the app requests a permission for accessing and reporting the user's location and after accepting that request the button turns green informing the user that the alert has been sent to the Operational Coordination Centre (see Figure 3-4). Moreover, the user can see the current local day and time on the left corner of the screen at all times. A table listing the members of the specific volunteer's team is also displayed on the right of the screen where each member's availability is also indicated (see Figure 3-5).



**Figure 3-4: Home page Button pressed / Alert Sent**

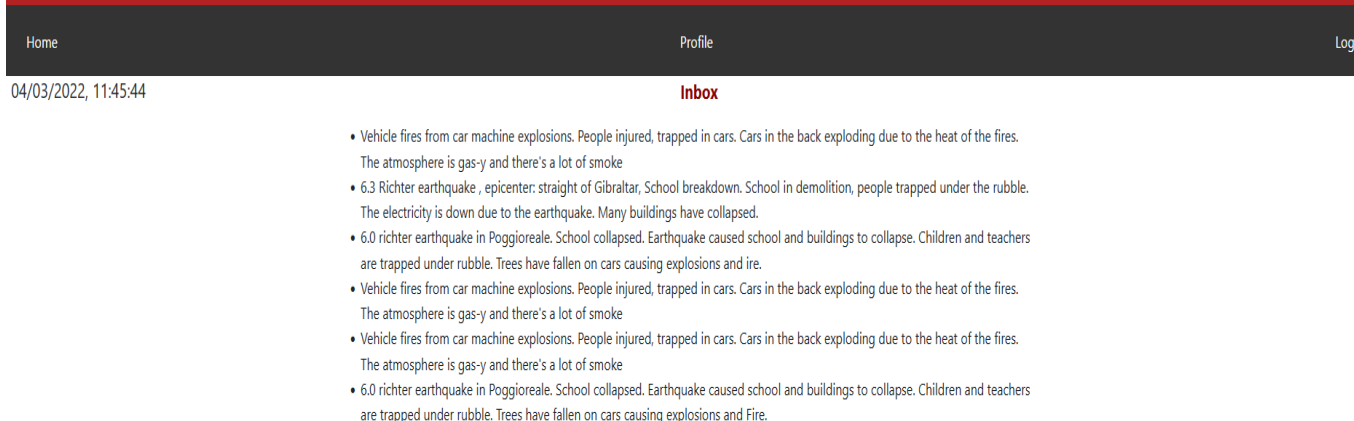


**Figure 3-5: Team members listed with respective availability**

### 3.1.3.3 Civilian module home page

In the civilian module home page, when a user is registered in the web application as "Civilian", he/she does not see the view the aforementioned screen shots displayed in Section 2.1 (i.e. Figures 3 – 5). Instead they can see a page with the ongoing emergencies located near them with a brief description and possibly supplied with some relevant routing information in the form of a text message. This description and information are provided by the field Commanding Officer via the Operational Coordination Centre after the emergency has been added in the database. **Figure 6** below shows what the "civilian" user sees in his/her screen.

"Volunteers don't get paid, not because they're worthless, but because they're priceless." – Sherry Anders



**Figure 3-6: Civilian module Home Page**

#### 3.1.3.4 Profile Page

In this screen, users can change their registered general information, their current password or even delete their account as shown in Figure 3-7.

##### Account settings

**Figure 3-7: Registered information (General)**

Moreover, users can indicate their specific skills and emergency response available equipment they possess for the event and the organization they belong to among the registered (listed) ones as shown in Figure 3-8.



Profile

Emergencies

Account settings

General

Change Password

Info

Delete Account

Age

35

Country

Greece

Skills

☐ Driver
 ☐ Emergency Communications
 ☐ Emergency Medical Help
 ☐ Firefighting
 ☐ First Aid
 ☐ Forest Firefighting
 ☒ Forest Patrolling
 ☐ Psychological First Aid
 ☒ Pilot
 ☐ Rope Rescue
 ☒ SAR

Equipment

☐ 4WD Vehicle(4 Wheel Drive)
 ☒ Aeroplane
 ☐ Forest Firefighting Helmets
 ☐ Human Dummies/ Search & Rescue Dummies
 ☐ Immobilization Board
 ☐ Life-Safety Rope
 ☒ Medical First Aid
 ☐ Mini Excavator Machine
 ☐ Non-Life-Safety (utility) Rope
 ☐ Pick Up Track
 ☐ Portable Engine Generator
 ☐ Portable Fully Equipped Communication Center
 ☐ Portable Pharmacy
 ☐ Portable Professional Pharmacy
 ☐ Portable Radios
 ☐ Professional Ladder
 ☐ Sked Stretcher
 ☐ Smoke Masks
 ☐ Steel Bar
 ☐ Strecher
 ☐ Throwline (Accessory Cord)
 ☐ Vacuum Stretcher Res-Q-Matt Plus
 ☐ Vibration Demolition Hammer
 ☐ Water Tank Truck (10000 LITERS)
 ☐ Work Light Tripods

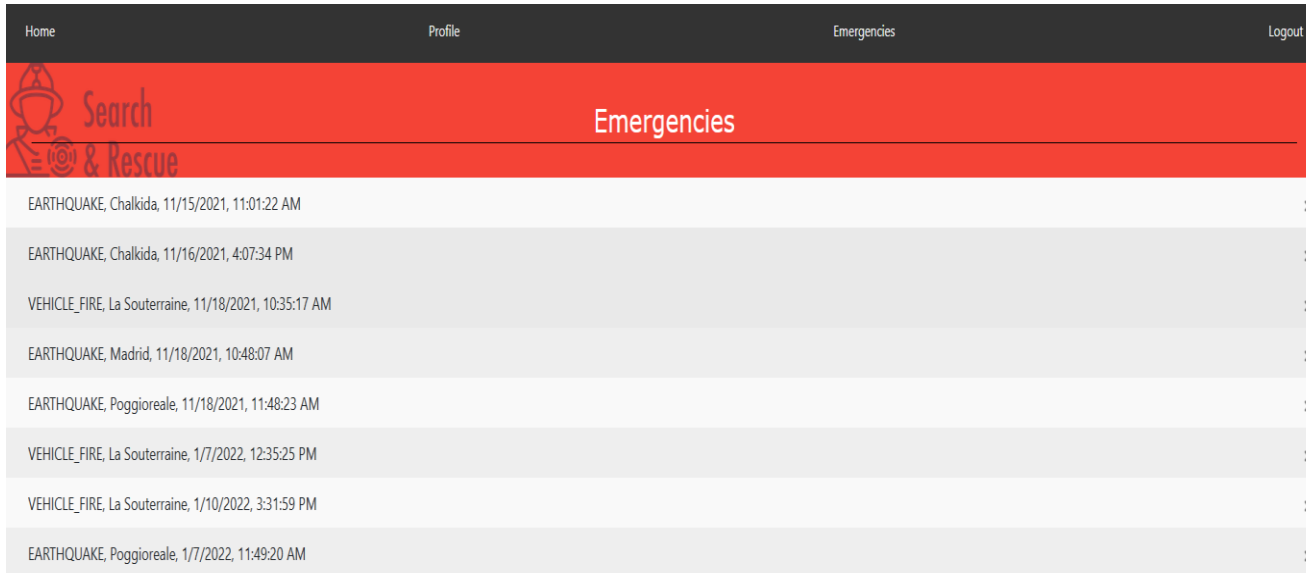
Save changes

Cancel

**Figure 3-8: Information on available equipment**

### 3.1.3.5 Emergencies Page

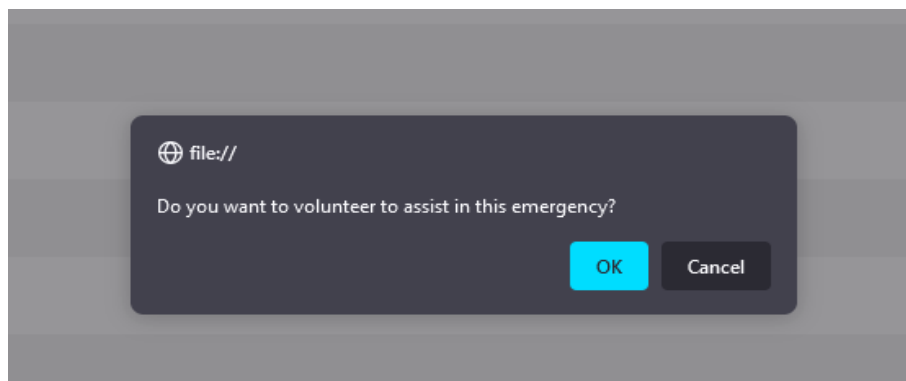
This screen allows the user to read alerts received by the Operational Coordination Centre. All pending emergencies sent to them by the Operational Coordination Centre are displayed here as shown in Figure 3-9.



EARTHQUAKE, Chalkida, 11/15/2021, 11:01:22 AM
EARTHQUAKE, Chalkida, 11/16/2021, 4:07:34 PM
VEHICLE_FIRE, La Souterraine, 11/18/2021, 10:35:17 AM
EARTHQUAKE, Madrid, 11/18/2021, 10:48:07 AM
EARTHQUAKE, Poggioreale, 11/18/2021, 11:48:23 AM
VEHICLE_FIRE, La Souterraine, 1/7/2022, 12:35:25 PM
VEHICLE_FIRE, La Souterraine, 1/10/2022, 3:31:59 PM
EARTHQUAKE, Poggioreale, 1/7/2022, 11:49:20 AM


**Figure 3-9: Emergencies Page**

By clicking one of these emergencies an alert dialog appears asking the volunteer, if they want to assist in this emergency (see Figure 3-10).



**Figure 3-10: Invitation to volunteer for assisting in the emergency**

By accepting the invitation, the volunteer now shows as being available (i.e. in green colour) in their team members' tables (previously shown in Figure 3-5) and the respective emergency turns also green indicating they have accepted to assist, as shown in Figure 3-11.

Home	Profile	Emergencies	Logout
			
EARTHQUAKE, Chalkida, 11/15/2021, 11:01:22 AM			X
✓ EARTHQUAKE, Chalkida, 11/16/2021, 4:07:34 PM			X
VEHICLE_FIRE, La Souterraine, 11/18/2021, 10:35:17 AM			X
EARTHQUAKE, Madrid, 11/18/2021, 10:48:07 AM			X
EARTHQUAKE, Poggioreale, 11/18/2021, 11:48:23 AM			X
VEHICLE_FIRE, La Souterraine, 1/7/2022, 12:35:25 PM			X
VEHICLE_FIRE, La Souterraine, 1/10/2022, 3:31:59 PM			X
EARTHQUAKE, Poggioreale, 1/7/2022, 11:49:20 AM			X

**Figure 3-11: Emergency shown in green is the one selected by the volunteer to assist**

#### 3.1.3.6 Logout button

This is the last functionality in the navigation bar and its use is to help the volunteer to simply log out of the application at any given moment.

The volunteer app may be accessed through <https://hit-projects.gr/VolunteerApp/> and its code is freely available in GitLab repository [https://gitlab.com/konnektable-devops/horizon-2020/s-r-central-repo-group/volunteer\\_app](https://gitlab.com/konnektable-devops/horizon-2020/s-r-central-repo-group/volunteer_app)

#### 3.1.4 Implementation into SnR Use Cases

1. The mobile app should allow participants' registration. Either as a person or a Team.
2. The registered entity will also need to declare the registration number of the formal registry (i.e., under the auspices of Civil Protection) that he/she/it belongs to, if it is applicable.
3. The app will not be available to on-scene bystanders that do not belong to a formally registered organization. However, the civilian module will always be available for their registration.
4. In the registration form there will be a formal declaration (legal), where volunteers should declare the authenticity of their personal information, certified field of expertise/hard skills.
5. The volunteer app will participate in the operationalization of Use Cases 2 (i.e rescue in mountainous area) and 4 (i.e. fire development in industrial area). EPAYPS personnel will run the simulation of the Operational Coordination Centre (OCC) in Use Case 4. KT will provide the backend implementation (i.e. the inventory database) through the ConCorde platform.
6. The app will offer the possibility to include up two team heads (Head and Deputy Head) for a Single Team. It will also offer the possibility to assign the overall responsible in charge of the Operation (Coordinator).

7. Every team's Head (and Deputy Head in case of the Head's inability to connect with the OCC) will be the liaison between team members and the OCC. In case the team is split during the operation, the Deputy Head has equal authority as the Head for liaising with the OCC, however, in case of conflicting orders, the Head's order supersedes.
8. Testing and relevant KPIs: the volunteer app will be tested in UC 2 simulating a plane crash in a mountainous area and UC 4 concerning fire development in an industrialized area. The relevant testing and related KPIs are provided in deliverable D8.9.

### **3.2 Evaluation of Voluntary Organizations**

For the evaluation of the Voluntary Organizations, Evaluation Reports are prepared with the care of the competent Regional Civil Protection Coordinator, upon the suggestion of the head of the respective body involved.

The Evaluation Reports are the main tool to capture the adequacy, effectiveness and efficiency of the members of the voluntary organizations involved per action and are prepared monthly only in case of mobilization. Then they are submitted to the Directorate of Volunteering and Education of the National Authority of Civil Protection and are registered in the Archive of Evaluation Reports of Voluntary Civil Protection Organizations.

By decision of the Head of the National Authority of Civil Protection, any necessary details for the application of the above-mentioned rules and policies may be re-regulated.

## 4 Conclusions and next steps

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Disasters occur in a random way, and the most of the times they leave authorities with not enough time to prepare. It is very important that every actor in the disaster management cycle clearly understands that preparedness for the most likely hazards and risks is of high importance. Along with emergency management, law enforcement, government organizations, disaster relief organizations, and many others, volunteers are a valuable part of a disaster response.

The improvement and modernization of the volunteers' implementation and mobilization framework, which is considered insufficient and non-functional, to ensure the effective operational involvement of volunteers in civil protection's actions, is very crucial for disaster management operations. Volunteers can enhance the ability of emergency authorities' response capacity by providing additional response capabilities through different skills, resources, and multiple roles. With a well-designed plan, it can be ensured the most efficient, effective response and recovery by using all available resources, including volunteers.

The proposals and the philosophy of the deliverable could be immediately applied in the legal framework of each country's civil protection. Finally, they could be used as the basis for further improvement of the procedures followed in every emergency operation.