

H2020 – Secure societies - Protecting freedom and security of Europe and its citizens SU-DRS02-2018-2019-2020– Technologies for first responders – Research and Innovation Action (RIA)



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

D8.4 S&R Use Case 3: Earthquake/ heavy storms between Vienna Rail Station & Kufstein railway station heavy damages in the rail station (Cross-border pilot, Austria-Germany) -Pilot plan

Workpackage:	WP8 – S&R Validation and Demonstration
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Disclaimer:

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Search and Rescue Project Profile

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Partners

	NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA) <u>Co-ordinator</u>	Greece
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SIMAVI Software Imagination & Vision	SOFTWARE IMAGINATION & VISION S.R.L (SIMAVI)	Romania
Maggioli	MAGGIOLI SPA (MAG)	Italy
Konnekt-able	KONNEKT-ABLE TECHNOLOGIES LIMITED (KT)	Ireland
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Atos	ATOS IT SOLUTIONS AND SERVICES IBERIA SL (ATOS)	Spain
HELLENC RISTITUTE OF TRANSPORT CERTH/HIT	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS (CERTH)	Greece
	UNIVERSITA DEGLI STUDI DI CAGLAIRI (UNICA)	Italy

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	UKEMED GLOBAL LTD (UGL)	Cyprus					
PSCEurope Public Safety Communication Europe	PUBLIC SAFETY COMMUNICATION EUROPE FORUM AISBL (PSCE)	Belgium					
UNIVERSITÀ DEGLI STUDI FIRENZE	UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI)	Italy					
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	UNIVERSITA CATTOLICA DEL SACRO CUORE (UCSC)						
VRIJE UNIVERSITEIT BRUSSEL	VRIJE UNIVERSITEIT BRUSSEL	Belgium					
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UBITECH ubiquitous solutions	GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS (UBITECH)	Greece					
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S&R Use Case 3: Earthquake / heavy storms between Vienna Rail Station & Kufstein railway station heavy damages in the = rail station (Cross-border pilot, Austria-Germany) - Pilot plan

THE REPORT OF TH	ENOSI PTYCHIOYCHON AXIOMATIKON YPAXIOOMATIKON PYROSVESTIR OY SOMATEIO (EPAYPS)	Greece			
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FIIBAP FUNDACIÓN PARA LA INVESTIGACIÓN E SaudMadrid INNOVACIÓN BIOSANITARIA DE ATENCIÓN PRIMARIA Servicio Madrileño de Salud	TARIA IARIA BIOSANITARIA DE ATENCIÓN PRIMARIA (FIIBAP)				
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Title of UC 3:

Heavy storms in the region of Kufstein railway station (cross-border pilot,

Austria-Germany)

1. Introduction

Context:

The Use Case is organised by two medical first responder organisations from Germany and Austria including their respective disaster relief units. It will be organised as a field exercise focusing on the response phase of the disaster risk management cycle. The scenario and exercise is envisioned at regional scale.

Weather: A heavy storm is ongoing, which uproots several trees and causes a blackout.

Safety/Security: no specific security threats are taken into account. Safety of the staff and volunteers has to be assured.

Special Equipment: in addition to the provided S&R Tools, the Use Case will use the train compartment, the earthquake house and gas street of the exercise area. The disaster relief unit of the Johanniter will bring their SanHist, Logistics Trailer and communication equipment.

Doctrines/ Standards/ Laws: INSARAG Guidelines, Plans of the training ground, Austrian Sanitary Act, SOPs of the disaster relief unit

Aims/ Objectives:

- Train patient routing system (tech. supported)
- Rebuild communication infrastructure/ad-hoc infrastructure to re-establish basic communication
- Train takeover of data management for different ambulance services at the command centre
- Manage Common Operational Picture (CONCORDE emergency app)
- Implement and train triage structures
- Conduct informed hazard assessment (using HazMat detection devices)
- Test interoperability of search and rescue with dogs and technical equipment
- Optional: Covid Tracing via Patient Routing System

UC Details:

A heavy storm is ongoing. An uprooted tree falls on the tracks, derailing a train that is approaching Kufstein railway station. Passengers that are unharmed are seeking shelter in a nearby building. Due to the storm, the regional command centre in Tyrol is experiencing a blackout and has lost communications. During the operation an unexpected gas explosion occurs at the building used as temporary shelter.

Trains in this region are frequent, carrying about 10-15.000 people a day between the eastern and western parts of Austria. Between the main train stations of Austria, impacts of different degrees at several points are known, most due to interruptions of the overhead wiring or the rail tracks caused by the storm. The train approaching Kufstein cannot brake in time, crashing into a tree that fell on the tracks, derailing a train waggon with approx. 40 people on board.

Communication infrastructure and electricity is collapsed in some of the municipalities. Communication is irregular and unstable. Because of the communication breakdown, the chaos will last longer. As soon as a public communication hub is launched, it breaks down again because of an overload. Data exchange/ transfer of patient information from one command centre to another is necessary due to a blackout in the region.

All of a sudden, a gas explosion occurs, which was triggered by a glowing cigarette that was improperly discarded next to a stack of gas barrels alongside a building nearby the train station, which as a consequence partially collapses. The building was used as a temporary shelter by train passengers that were involved in the recent train accident. The number of people in the building

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is unknown. Some ten people are found outside of the building remains, shocked and lightly injured.

2. Responsible End – User Organization

JOAFG/JUH

3. Time $(*)^1$ and place²

The execution of the exercise is planned for September 2022 (M27) in week 37 (12.-18.9) and will take place at the NÖ Feuerwehr- und Sicherheitszentrum, Tulln, Austria. In parallel, the exercise may be supported by the Vienna Command Center. The exercise should start at around 7:30 and last 8 to 12 hours.

4. Components (*) / technologies that will be tested

- Robot: SeekurJr (weight 80kg, max. payload 50kg, 3-5h operating time) (DFKI)
- Obstacle avoidance system (THALIT)
- CONCORDE Communication App (KT)
- Smartwatches (KT)
- Six Gas HazMat Monitor (UNICA)

5. First version of KPIs

- Establish communication link to the next full capable node
- Time to Re-establish communication
- Data transfer/Data Exchange digital-paper-digital
- Interoperability of patient routing system AUT/GER (exchange patient data via patient routing system)
- Time until all trapped victims are rescued
- Usability of technical equipment (gas detection, UGV, CONCORDE app)
- Interoperability of CONCORDE platform
- Connection with S&R platform

6. Participating technical support partners (internal) and other members of consortium S&R as Players, Observers and Evaluators etc

Technical support: DFKI, THALIT, SYNIO, KT (remote), UNICA (tbd) Observers: JOAFG, JUH Evaluators: JOAFG, Exercise Control: JOAFG, JUH *(Contributions may be further defined closer to the execution of the exercise)*

7. External Participants as players, evaluators, actors-guests in UC

¹ See Attachment 1 (Timeline)

² See Attachment 2 (Overview of training grounds)

8. Ethics Approval³

The ethical committee for Use Case 3 was selected and described in the Ethics approval form. The form was filled, paying due attention to information about human participation, recruitment, inclusion and exclusion criteria and a thorough ethical questionnaire. The participant Information Sheet was prepared as well as the Field demonstration consent form and the explanation of risk. As the Use case will involve the participation of employees, the relevant considerations were also summarized. The document has been reviewed and approved by the internal Ethics committee in March 2021. Furthermore, additional statements regarding a possible participation of the K9 unit and considerations regarding a safe use of gases for the purpose of testing the Six Gas Hazmat Monitor are being issued.

9. Gaps/ Problems that should be closed and context in which they appear

- availability of all required partners and respective tools needs to be assured

- potential travel restrictions will have to be kept in mind (Covid regulations and potential new restrictions)

- readiness, interoperability and proper functioning of S&R tech. solutions

- trainees need to be aware of the S&R technologies in use and how to use them (briefings) in order to ensure adequate testing

10. Certificates of Participation

tbd

11. Planning Team of UC

Georg Aumayr (lead)	Georg.Aumayr@johanniter.at
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³ See Attachment 2 (Overview of training grounds)

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D8.4

2 Attachments

2.1 Preliminary Timeline

Search			M11		M12				M18				M19				M20					M21				M				M23	
Search			May 2021		June 202				Dec 20				Jan 20	022			Feb 20	022			M	ar 2022				Apr 2				May 2	
A Rescue		Calendar Week		21 22		25 26			49 50			1	-	3	4	5	6	7	8	9	10		12	13	14	15		17	18		20 21
	/GER (JOAFG/JUH)	Date	3 - 7 10 - 14 17 - 21 2	4 - 28 31 - 4	7 - 11 14 - 182	21 - 25 28 - 2		29 - 3 6	- 10 13 - 1	7 20 - 2	427 - 31	3 - 7	10 - 14 1	7 - 21 24	- 28 3	1 - 4 7	- 11 14	4 - 18 2	1 - 25	28 - 4	7 - 11 1	4 - 182	1 - 25 2	28 - 1	4 - 8	11 - 15	18 - 22 2	25 - 29	2-6 9	∋-13 <mark>1</mark>	16 - 20 23 -
UC Preparation Phas	se																														
	Decision Meeting	meeting to decide final time p	olan, sol <mark>utions e</mark> tc.																												
	Pilot Plan (-30.06.21)	Deliverable of pilot planning																													
	Reservation exercise gro	unds																													
	Recruitment of participan	ts small group for dry runs, 20-3	0 participants for simula	ion exercise	incl. External o	rganizations)																									
	other preparation meetin	gs																													
UC Execution Phase		•																													
	Integration Meeting	coordination meeting of all U	C stakeholders, discussi	on of integrati	on of tech. Solu	tions into End L	Jser s	stems, in	form <mark>ation</mark>	exchang	ge, evalu	ation c	oncept																		
	Dry-run 1	testing of the use case design	and technical infrastruc	ture and com	onents, proble	ms need to be s	olved	until dry-r	run 2																						
	Dry-run 2	full test for the real trial, when	e possible in the real loc	ations (esp. C	command cente	r), Go-NoGo de	cision	of solutio	ns																						
	Dry-run 3 (optional)	optional additional dry-run if p	problems in Dry-run 2 ap	peared that ne	ed to be solve	d																									
	Simulation Exercise					_																									
UC Evaluation Phase																															
	Data Synthesis Meeting	meeting to combine the data									_																				
	Evaluation Meeting other evaluation meeting	meeting to collect all different	t evaluation reports and i	esuits to disc	uss final outcor	nes					_																				
Others	ouler evaluation meeting	10				_																						_			
	any other bigger events					_									_				_									_			
	any caller bigger evente																														
Color codes																															
universal validity																															
earliest possible timing	g																														
optimal timing																															
latest possible timing																															

Figure 1-1: Preliminary Timeline I

Search and Rescue

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D8.4

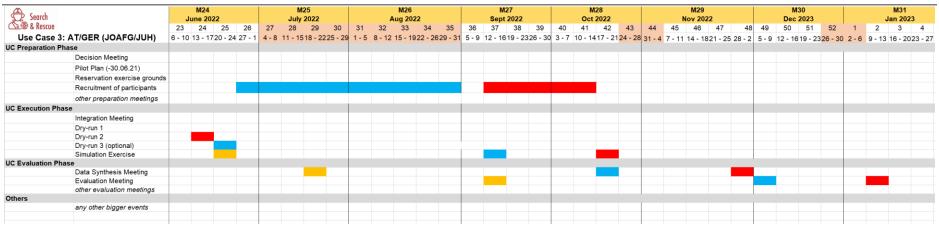


Figure 2-2: Preliminary Timeline II

2.2 Overview of training grounds

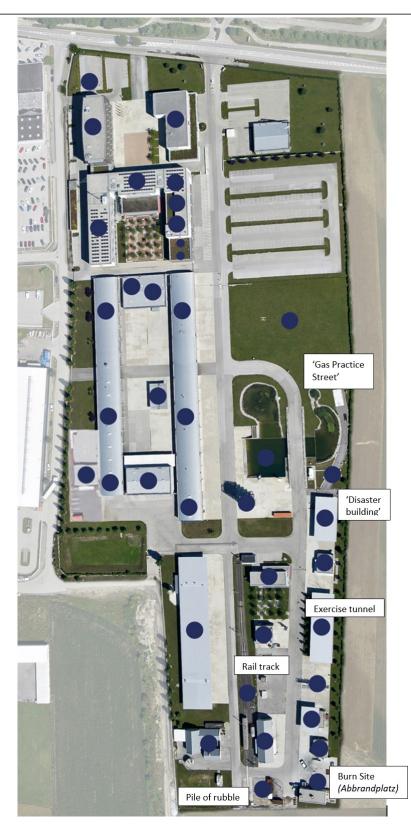


Figure 3-3: Overview of the training grounds accessed on 11.06. on: https://www.noefsz.at/?kat=8&Areal

2.3 Ethics Approval Form



Ethics approval form for research activities involving human participation

Aim

Copies of opinions/approvals by ethics committees for the research with humans must be obtained and confirmation sent to the REA. The opinions/approvals should address the research which includes participants during the lab trials and field demonstrations at all locations.

Important: This form must be filled by each partner conducting research with humans and for each pilot location.

If there is no proper structure to provide authorisations/approvals in the institution performing research involving participants, based on the principle of proportionality and according to practice, an ethics opinion may be given, for example, by: the University committee of the coordinator, the University committee of another research partner, approval from a relevant authority in the country (if applicable), ethics review by the European Commission.

In addition of filling this template and getting an approval from ethical committee, it is the responsibility of each partner conducting pilots to obtain the appropriate opinions from competent authorities should local or national law impose it to them.

Identification of Par	ner and Ethical committee
------------------------------	---------------------------

Organization/Company/University:	Johanniter Ausbildung und Forschung gem. GmbH (JOAFG)			
Ethical Committee's description:	Univ.Prof. DDDr. Ullrich Körtner, Head of internal Ethics Committee			
	Dr. Med. Rainer Thell, chief medical officer			
	Dr. med. Christian Emich, federal chief medical officer			
	Dr. jur. Robert Brandstetter, employment law			

Identification of researcher(s) introducing the form

Name of Researcher(s) introducing the form:	DiplIng. Sabrina Scheuer, MSc
	Mag.a Pia Ferner, MSc
Name of Supervisor(s):	Mag. Georg Aumayr
Date:	

Brief description of the SnR project

The Search & Rescue (S&R) project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882897. Its goal is to establish an efficient synchronisation framework managing the data, developed services and information flow between the different authorities involved in emergency management operations and the crisis managers (Rescue forces, Police, Fire- department, etc.). Ad hoc web portals and additions to stakeholders' systems and back-offices will provide a common, uniform and ubiquitous platform for collecting, analysing and sharing real time data from the sensors, drones and rescue robots for supporting management decisions. Federated security will enable access by different stakeholders to services provided by different stakeholders.

The SnR consortium is composed by AIDEAS OU, SOFTWARE IMAGINATION & VISION SRL (SIMAVI), MAGGIOLI SPA (MAG), KONNEKT ABLE TECHNOLOGIES LIMITED (KT), THALES ITALIA SPA (THALIT), ATOS IT SOLUTIONS AND SERVICES IBERIA SL (ATOS), ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS (CERTH), UNIVERSITA DEGLI STUDI DI CAGLIARI (UNICA), UKEMED (GLOBAL) LTD (UGL), PUBLIC SAFETY COMMUNICATION EUROPE FORUM AISBL (PSCE), UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI), DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH (DFKI), UNIVERSITA CATTOLICA DEL SACRO CUORE (UCSC), VRIJE UNIVERSITEIT BRUSSEL (VUB), SYNYO GmbH (SYNYO), UNIVERSITEIT HASSELT (UHASSELT), SPOLECZNA AKADEMIA NAUK (SAN), GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON, PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS (UBITECH), ELLINIKI OMADA DIASOSIS SOMATEIO (HRT), ENOSI PTYCHIOYCHON AXIOMATIKON YPAXIOMATIKON PYROSVESTIR OY SOMATEIO (EPAYPS), JOHANNITER-UNFALL-HILFE EV (JOHANNITER), CONSIGLIO NAZIONALE DELLE RICERCHE (CNR), POMPIERS DE L'URGENCE INTERNATIONALE (PUI FRA01), ASOCIATA CLUSTERUL ROMAN PENTRU PROTECTIE SI ECOLOGIE IN DOMENIUL MATERIALELOR CHIMICE, BIOLOGICE, RADIOLOGICE/NUCLEARE SI EXPLOZIVE (PROECO), SERVICIO MADRILENO DE SALUD (SERMAS), ESCUELA ESPANOLA DE SALVAMENTO Y DETECCION CON PERROS (ESDP).

Description of activity involving human participation

In order to test part of the S&R system components developed within the SnR project, a training exercise for the disaster relief unit of the Johanniter Austria and other relevant first responder organisations will be organized. The exercise focuses on the use case scenario of heavy storms nearby Kufstein railway station, involving heavy damages in the rail station.

The training exercise is envisioned as a one day activity involving participants from different first responder organisations and rescue dog units. Training participants will be briefed about the overall scenario, relevant objectives and where applicable about the relevant equipment (SnR technologies) to be used. Goal is to test S&R Platform (or components) in real settings, focusing on how first responders utilise the developed technologies in real scenarios.

The exercise will require the exercise participants to assess the overall situation and set necessary tasks to locate and rescue victims, including triage. Training participants may be required to adjust and react to changing circumstances within the controlled training exercise.

Aim of the scenario:

- > Train patient routing system,
- rebuild communication infrastructure,
- train to take over data management for different ambulance services at the command centre,
- Manage Common Operational Picture (COP)
- Implement and train triage structures,
- > Interoperability of search and rescue with dogs and technical equipment,
- > Informed hazard assessment (using HazMat detection devices)

In addition, the scenario will involve volunteers acting as victims in the scenario. They will be briefed and positioned within the exercise grounds. Safety and security of these actors will be monitored and the exercise interrupted if necessary (actors will e.g. be picked up from hiding places by organizers in case weather conditions interrupt a safe conduction of the exercise). Specifications regarding the pilot environment will be detailed in a pilot plan including scenarios that will run during each pilot, the actors involved, the evaluation indicators and the overall time plan, according to project guidelines.

For project purposes the exercise will have to be thoroughly documented, taking into account all necessary informed consent requirements from participants. Participants will be asked to fill in a questionnaire and some will be asked to give an interview about the exercise as part of the data collection for the evaluation. In case health data of participants is collected (e.g. through health monitor devices) participants will be thoroughly briefed and informed consent needs to be given for any health data collection or processing.

Details of the recruitment, inclusion and exclusion criteria

Recruitment for field exercise participation will be done internally (focus: disaster relief unit) and on a voluntary basis. External first responder organizations will be invited to participate in the exercise as well (focus on fire fighter organizations and other disaster relief units). Participants need to have basic skills and knowhow to fulfil the required role in the exercise. Participants will need to attend a briefing prior to the exercise.

Participants have to be physically and mentally fit, based on an individual's self-assessment. In case of an apparent infection or other health restrictions impeding on the participant's (and/or others) health and safety, the participant will be excluded. With regards to COVID-19, all participants may be asked to provide a negative Covid test result.

Intoxication will be an immediate reason for exclusion.

The victim volunteers will be recruited internally from the organization including the research department and the emergency and patient transport of the Johanniter. The same criteria for the participation as for the active exercise participants apply to them.

Ethical questionnaire

	Mark with X in box	Yes	No	N/A
1	Will you describe the main experimental procedures to participants in advance, so that they are informed about what to expect?			
2	Will you ensure that the participation of participants is voluntary?			
3	Will you obtain written consent for participation?			
4	If the research is observational, will you ask participants for their consent to being observed?			
5	Will you tell participants that they may withdraw from the research at any time and for any reason?			
6	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?			
7	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?			
8	With research that requires audio or video recordings, will you tell your participants that their permission will be sought to play any excerpts in the course of presentations given?			

If you have marked Yes to Q1: please annex⁴ a copy of the Information Sheet

If you have marked Yes to any Q2-8: please annex Informed Consent Form⁵

If you have marked No to any of Q1-8, please give an explanation on a separate annex. (Note: N/A = not applicable).

	Mark with X in box	Yes	No	N/A
9	Will your project involve deliberately misleading participants in any way?			
10	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? If Yes, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).			

⁴ See Annex I: SnR Participant Information Sheet (a separate information sheet for the exercise will be circulated among participants once details on the exercise are finalized)

⁵ See Annex II: SnR Lab trial/Field demonstration Consent Form

If you have marked Yes to Q9 or 10, please give a full explanation on a separate annex⁶.

	Mark with X in box	Yes	No	N/A
11	Are participants children under 18 of age?			
12	Are participants vulnerable individuals or groups?			
13	Are you processing data concerning health? ⁷			
14	Are some or all participants employees of your organization or of a partner's organization?			

If you have marked Yes to Q11, annex details of the procedures for obtaining approval from the guardian/legal representative and the agreement of the children or other minors.

If you have marked Yes to Q12, annex details of the type of vulnerability and demonstrate appropriate efforts to ensure fully informed understanding of the implications of participation.

If you have marked yes to Q13, annex your policy on incidental findings⁸.

If you have marked yes to Q14, annex the steps you will follow to ensure that participant employees are not subjected to any form of coercion⁹.

This form and any attachments, along with your Consent Form and Participation Information Sheet, should be submitted to your Ethics Committee, for consideration. If any of the above information is missing, or if additional information is needed, your application will be returned to you.

STATEMENT OF ETHICAL APPROVAL

This task has been considered by the Ethical Committee and is now approved for the following reasons: Complete

Signed:

Date:

⁶ See Annex III: Explanation of risks

⁷ This may be subject to change, depending on whether the SnR solution ,health monitor device by CERTH will be tested or not.

⁸ See Annex I: Section on 'incidental findings policy' of SnR project

⁹ See Annex IV: Considerations for research/trials involving participation of employees

D8.4

Annex I: SnR Participant Information Sheet

About this information sheet

This information sheet generally explains how the Search & Rescue (S&R) consortium processes personal data of individuals who are interested in taking part in the project information gathering (e.g. questionnaires, interviews, focus groups, workshops) and research activities (e.g. pilot trials, live demonstrations). Participation in these activities is exclusively addressed to adult individuals and is fully voluntary, meaning that the latter may choose not to take part or subsequently cease participation at any time. If you are interested in participating in the aforementioned activities, you will be asked to sign a consent form to document and verify the information you have been given and relevant communications will be made available to you, specifying the place and date/time of the activities to take place.

About Search & Rescue

The Search & Rescue (S&R) project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882897. Its goal is to establish an efficient synchronisation framework managing the data, developed services and information flow between the different authorities involved in emergency management operations and the crisis managers (Rescue forces, Police, Firedepartment, etc.). Ad hoc web portals and additions to stakeholders' systems and back-offices will provide a common, uniform and ubiquitous platform for collecting, analysing and sharing real time data from the sensors, drones and rescue robots for supporting management decisions. Federated security will enable access by different stakeholders to services provided by different stakeholders.

The SnR consortium is composed by AIDEAS OU, SOFTWARE IMAGINATION & VISION SRL (SIMAVI), MAGGIOLI SPA (MAG), KONNEKT ABLE TECHNOLOGIES LIMITED (KT), THALES ITALIA SPA (THALIT), ATOS IT SOLUTIONS AND SERVICES IBERIA SL (ATOS), ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS (CERTH), UNIVERSITA DEGLI STUDI DI CAGLIARI (UNICA), UKEMED (GLOBAL) LTD (UGL), PUBLIC SAFETY COMMUNICATION EUROPE FORUM AISBL (PSCE), UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI), DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH (DFKI), UNIVERSITA CATTOLICA DEL SACRO CUORE (UCSC), VRIJE UNIVERSITEIT BRUSSEL (VUB), SYNYO GmbH (SYNYO), UNIVERSITEIT HASSELT (UHASSELT), SPOLECZNA AKADEMIA NAUK (SAN), GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON, PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS (UBITECH), ELLINIKI OMADA DIASOSIS SOMATEIO (HRT), ENOSI PTYCHIOYCHON AXIOMATIKON YPAXIOMATIKON PYROSVESTIR OY SOMATEIO (EPAYPS), JOHANNITER-UNFALL-HILFE EV (JOHANNITER), CONSIGLIO NAZIONALE DELLE RICERCHE (CNR), POMPIERS DE L'URGENCE INTERNATIONALE (PUI FRA01), ASOCIATA CLUSTERUL ROMAN PENTRU PROTECTIE SI ECOLOGIE IN DOMENIUL MATERIALELOR CHIMICE, BIOLOGICE, RADIOLOGICE/NUCLEARE SI EXPLOZIVE (PROECO), SERVICIO MADRILENO DE SALUD (SERMAS), ESCUELA ESPANOLA DE SALVAMENTO Y DETECCION CON PERROS (ESDP).

Purpose of SnR information gathering and research activities involving human participants

SnR information gathering (e.g. questionnaires, interviews, focus groups, workshops) and research activities (e.g. pilot trials, live demonstrations) involving the participation of humans target the elicitation of the user requirements and practical needs with regard to the SnR solution, the creation of an in-depth understanding of the role of the civil society in Crisis Management, the dissemination of the project outcomes, the establishment of synergies and the exchange of knowledge, the actual testing and validation of the equipment

and tools to be developed, as well as the acquisition of feedback on the SnR business plan. The lawful basis of processing is Article 6, 1, a) of the General Data Protection Regulation.

Personal data being collected and processed

Participation in the SnR information gathering and research activities entails the collection and processing of the following categories of personal data:

- Name
- E-mail address
- Title and Occupation
- Age and date of birth (to confirm that the participant is at least 18 years old)
- Sex^{*}
- Biometric data* (e.g. body temperature, respiratory rate, hearth rate, systemic arterial pressure, arterial oxygen saturation (by pulse oximetry)).
- Health status*
- Vital signs*
- Location*

*Only when taking part in lab trials and field demonstrations with the goal of supporting decision making.

Data controller/processor

The roles of the data controller and data processor in SnR coincide and may be resumed by either of the SnR partner organisations acting as end users and pilot leaders, namely

- ELLINIKI OMADA DIASOSIS SOMATEIO (HRT),
- ENOSI PTYCHIOYCHON AXIOMATIKON YPAXIOMATIKON PYROSVESTIR OY SOMATEIO (EPAYPS),
- JOHANNITER-UNFALL-HILFE EV (JOHANNITER),
- JOHANNITER ÖSTERREICH AUSBILDUNG UND FORSCHUNG GEMEINNÜTZIGE GMBH (JOAFG),
- CONSIGLIO NAZIONALE DELLE RICERCHE (CNR),
- POMPIERS DE L'URGENCE INTERNATIONALE (PUI FRA01),
- ASOCIATA CLUSTERUL ROMAN PENTRU PROTECTIE SI ECOLOGIE IN DOMENIUL MATERIALELOR CHIMICE, BIOLOGICE, RADIOLOGICE/NUCLEARE SI EXPLOZIVE (PROECO),
- SERVICIO MADRILENO DE SALUD (SERMAS), and
- ESCUELA ESPANOLA DE SALVAMENTO Y DETECCION CON PERROS (ESDP)

or any partner undertaking the organisation of interviews, focus groups or workshops, namely

- NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA),
- AIDEAS OU,
- KONNEKT ABLE TECHNOLOGIES LIMITED (KT),
- THALES ITALIA SPA (THALIT),
- ATOS IT SOLUTIONS AND SERVICES IBERIA SL (ATOS),
- ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS (CERTH),
- UNIVERSITA DEGLI STUDI DI CAGLIARI (UNICA),
- UKEMED (GLOBAL) LTD (UGL),
- PUBLIC SAFETY COMMUNICATION EUROPE FORUM AISBL (PSCE),
- UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI),
- SYNYO GmbH (SYNYO),

- UNIVERSITEIT HASSELT (UHASSELT),
- SPOLECZNA AKADEMIA NAUK (SAN),
- GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON, PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS (UBITECH),
- ENOSI PTYCHIOYCHON AXIOMATIKON YPAXIOMATIKON PYROSVESTIR OY SOMATEIO (EPAYPS),
- CONSIGLIO NAZIONALE DELLE RICERCHE (CNR),
- ASOCIATA CLUSTERUL ROMAN PENTRU PROTECTIE SI ECOLOGIE IN DOMENIUL MATERIALELOR CHIMICE, BIOLOGICE, RADIOLOGICE/NUCLEARE SI EXPLOZIVE (PROECO)

Data protection officer

For more information or complaints, the contact details of the data protection officer are

Dr. Christos Ntanos

Zografou Campus

9, Heroon Polytechniou Str.

157 80 Zografou

+30 210 772 2085

cntanos@epu.ntua.gr

Recipients

Exclusively for research coordination purposes, such as the organisation of the said information gathering and research activities, the collected personal data may be transferred to other partners of the SnR Consortium.

Transfer to third countries

No personal data will be transferred to any recipients outside the territory of the EU and the EEA.

Retention period

The collected personal data will be retained up to 6 months after the end of the project.

Incidental Findings Policy (in case of participation to trials or pilots)

The SnR consortium is aware that research involving physiological or biometric assessments may uncover physical conditions of which participants are unaware. Such incidental findings are categorised as anticipatable.

In the event of any incidental finding discovered throughout the execution of the SnR project, the following policy will apply:

(1) In a first place, within 72 hours (3 days), this incidental finding will be referred by the researcher to:

- the SnR Coordinator
- the Ethical Board (EB) and
- the European Commission, in its funding agency capacity, via the Project Officer

(2) These communications are done with the view to evaluate their ethical implications and to reach a decision on further action by:

- a) determining the scientific and clinical validity of the finding, and
- b) whether or not it is appropriate to disclose the finding to the participant, and
- c) an appropriate method for disclosing the finding to the participant.

(3) Upon receiving the notification of the finding, after having obtained an advice from the Ethical Board, the SnR Coordinator discusses with the Project Officer the risks and benefits of disclosing the finding to the study participant. In case of emergency, the Ethical Board's advice may be omitted. A determination is made and reported back to the researcher on the decision to disclose the finding to the participant and if the plan for communicating the disclosure is appropriate.

Your rights

- You have the right to withdraw your consent
- You have the right to access information held about you
- You have the right to correction of any inaccurate personal data about you
- You have the right to restriction of processing of your personal data
- You have the right to deletion of your personal data
- You have the right to lodge a complaint regarding the use of your data. This can be done by contacting the NTUA's data protection officer.

Upon modification of the terms of your participation in the SnR information gathering and research activities, you will be notified and asked to renew your consent.

Annex II: Lab trial/Field demonstration Consent Form

About this consent form

After having read the above participant information sheet, this consent form needs to be filled by any individual willing to take part in SnR research activities (pilot trials, live demonstrations).

Consent information

By sending this form and clicking the button "I AGREE", I, as the Data Subject, hereby consent to participating in *the Austrian SnR Use Case*, as well as to the processing of my below given personal data I hereby voluntarily provide to *Johanniter Ausbildung und Forschung gemGmbH (JOAFG)*. I acknowledge that the Personal Data which relate to my person represent the so called personal data within the meaning of the Regulation 2016/679 of the European Parliament and the Council (EU) of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement on such data and repealing Directive 95/46/EC ("GDPR"). At the same time I declare that I am at least 18 years old.

Consent form

For the purposes of participating in SnR pilot trials, live demonstrations and receiving relevant communications, I am willing to provide the following personal data:

- Name: Cliquez ou appuyez ici pour entrer du texte.
- E-mail address: Cliquez ou appuyez ici pour entrer du texte.
- Title and Occupation (or company): Cliquez ou appuyez ici pour entrer du texte.
- Sex:
- **Biometric data** (e.g. body temperature, respiratory rate, hearth rate, systemic arterial pressure, arterial oxygen saturation (by pulse oximetry))
- Location
- I confirm that I am at least 18 years old \Box
- I confirm that I have carefully read the S&R participant information sheet \Box

I agree 🗆

Consent for incidental findings communication

The SnR consortium is aware that research involving physiological or biometric assessments may uncover physical conditions of which participants are unaware. Such incidental findings are categorised as anticipatable.

I choose to receive the incidental finding result after having read the SnR's Incidental Findings Policy

or

I choose NOT to receive the incidental finding result after having read the SnR's Incidental Findings Policy

Annex III: Explanation of Risk

While the exercise organizers will ensure high safety and security standards, there is a residual risk of physical or mental harm during or after the execution of the training exercise. It is important that all participants are made aware of these residual risks and their own responsibility to take adequate measures to always stay safe. These measures also include the use of Personal Protective Equipment (PPE).

The exercise will simulate a possible real-case Search and Rescue scenario which will put participants under stress as they will have to act under time pressure in difficult terrain. Therefore, it is important that participants are aware of the key factors framing the exercise. For the purpose of the training unexpected events may happen throughout the exercise to evaluate how participants react to changing circumstances, in a controlled training environment.

Same conditions that apply to real-case scenarios apply to the training scenario. Therefore, every participant is required and responsible to ensure and prioritise his/her own safety and security and that of others, including adhering to briefings, relevant safety and security protocols and continuous risk assessment of the situation.

Prior to the exercise a safety and security briefing document will be provided, detailing information on safety measures and guidance on how to handle accidents, 'SanReal' (real injuries) and 'no play procedures' as well as defining safety and security roles among the organizers. This will include among other things also detailed information on respective hospitals in the vicinity of the exercise grounds and rules of conduct in case of emergency. Furthermore, first aid responders will be available at the training site.

In case psychological assistance is needed, JOAFG has a specific PEER System in place that can be accessed by participants in the form of a debriefing and as additional possibility for psychological followup on request.

It is important to note that actors will also receive a separate briefing, informing about potential risks on site and tailored to their roles in the scenario.

Annex IV: Considerations for research/trials involving participation of employees

It is important to be attentive to the situation or role of employees concerning exercise or research participation in order to avoid any potential form of coercion.

First and foremost it is important to stress that the participation in the exercise is voluntary. While EMS and other personnel may have to obtain a specific number of training hours in order to stay operational in their professions it is free to them to decide whether they would like to attend this specific training.

Employees are free to participate in the simulation exercise. Participation will not be a condition for employment. An employee's decision whether to participate in such research or trial exercises may not affect (positively or negatively) performance evaluations, career advancement, or other employment-related decisions made by peers or supervisors.

In order to reduce the risk of coercion, recruitment may be done through postings or sign-up sheets that will require an interested employee to initiate contact about participation. This may reduce the risk of influence through direct personal recruitment.

Furthermore, employees (and other participants) will be free to withdraw from the exercise at any point in time without any form of negative implications.