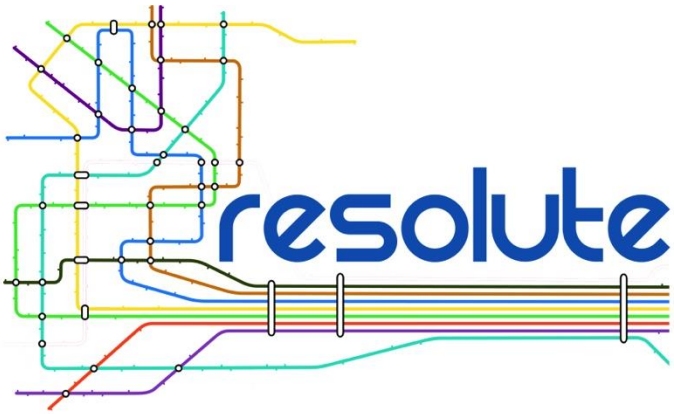

2ND WORKSHOP PROCEEDINGS

Project Title	RESOLUTE
Project number	653460
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Confidentially Level	PU
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Contributors	all

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PROJECT CONTEXT

Workpackage	WP7: Dissemination
Task	T7.2
Dependencies	This deliverable influences the whole project work.

Contributors and Reviewers

Contributors	Reviewers
L. Mendoza, HUMANIST VCE	CERTH
Jan-Paul Leuteritz, Fraunhofer IAO	ATTIKO Metro
Ofer Lidor, Fraunhofer IAO	
E. Bellini, UNIFI DISIT	

Version History

Version	Date	Authors	Sections Affected
1	08/11/16	L. Mendoza	All
2	13/12/16	L.Mendoza	All
3	10/12/16	L.Mendoza	All
4	24/02/2017	P. Nesi	All

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Table of Content

1 EXECUTIVE SUMMARY

Increasing Europe's resilience to crises and disasters is a topic of highest political concern in the EU and its Member States and Associated Countries. Regarding the specific case of transport systems, it can be said that those have developed a prominent safety and business critical nature, in view of which current management practices have shown evidence of important limitations in terms of resilience management.

Furthermore, enhancing resilience in transport systems is considered imperative for two main reasons: such systems provide critical support to every socio-economic activity and are currently themselves one of the most important economic sectors and secondly, the paths that convey people, goods and information, are the same through which risks are propagated.

The final goal of RESOLUTE is to adapt and adopt the identified concepts and methods from the guidelines defined within the project for their operationalization and evaluation when addressing Critical Infrastructure (CI) of the Urban Transport System (UTS), through the implementation of the RESOLUTE Collaborative Resilience Assessment and Management Support System (CRAMSS), that adopts a highly synergic approach towards the definition of a resilience model for the next-generation of collaborative emergency services and decision making process.

The project recognises foremost the ongoing profound transformation of urban environments in view of ecological, human and overall safety and security needs, as well as the growing importance of mobility within every human activity. Sustainability is rapidly becoming an imperative need across all economic and social domains. Among many things, this requires overall heightened operational efficiency, mainly by optimising the allocation and utilisation of available resources (organisational technical and human), whilst striving to continuously minimise any source of waste, namely incidents, accidents and other operational failures.

Within this context, RESOLUTE considers resilience as a useful management paradigm, within which adaptability capacities are considered paramount. Rather than targeting continuous economic and financial growth of businesses and market shares, organisations must generate the ability to continuously adjust to ever-changing operational environments.

In order to achieve this, the project consortium planned to organise workshops that would ease the reflection on the guidelines preparation and on their implementation.

In this context, RESOLUTE organized its second workshop on 19th October 2016, aiming at engaging operators and stakeholders in the application of the European Resilience Management Guidelines, while testing and exchanging on the future Collaborative Resilience Assessment and Management Support Systems via focus groups and usability tests.

The workshop was also the occasion to present the pilot test plans for Athens and Florence to the audience in order to receive feedback on their preparation.

2 INTRODUCTION

Two of the most important products of RESOLUTE are the European Resilience Management Guidelines (ERMG) and the Collaborative Resilience Assessment and Management Support System (CRAMSS).

In the view of having these tools promoted and well known by Member States, Associated Countries and Critical Infrastructure Providers, a number of dissemination actions has been planned during the whole project lifetime. The aims of dissemination actions are to:

- Create awareness about the project and its results towards the EU and Associated Members policy makers and EU citizens
- Create a project community
- Set out an overall dissemination plan
- Organize workshops as well as the final event in order to ensure a proper project results presentation.

This deliverable provides a description of the second project workshop and its outcomes. The workshop aimed at engaging operators and stakeholders in the application of the European Resilience Management Guidelines (ERMG) and testing and exchanging on the future Collaborative Resilience Assessment and Management Support Systems (CRAMSS) via focus groups and usability tests.

All conclusions will serve for finalizing the work on CRAMMS development and usability, as well as for the updated version of the ERMG, expected towards the end of the project.

The workshop was organized on 19 October 2016 in Athens, Greece.

3 WORKSHOP PREPARATION

According to the RESOLUTE dissemination plan, each event preparation is suggested by the Dissemination manager (HUMANIST) and approved by the Consortium. Each of the following elements was previously defined for the organization of the workshop:

- General objective of the workshop in the dissemination plan
- Definition of the target communities and auditors to be reached/engaged
    - The second workshop aimed at engaging operators and stakeholders in the application of the European Resilience Management Guidelines (ERMG) and testing and exchanging on the future Collaborative Resilience Assessment and Management Support Systems (CRAMSS) via focus groups and usability tests
- Definition of the workshop program according to the objectives, and target goals/topics to be reached. The program elaboration includes:
    - Presentations by the Project representatives, including an overview of RESOLUTE
    - Collaborative and workshop sections according to the goals, to be specifically prepared with the cooperation of all project partners.
    - Conclusions and questionnaire collection
    - Production of the workshop proceedings
- According to the program, a preliminary list of speakers aligned with the event objectives was produced and contained:
    - Identification and selection of speakers
    - Choice of relevant national stakeholders for consultation
- Initial promotion plan, with the use of
    - Management of the workshop announcement

  - the mailing list elaborated for the Newsletter dissemination to also disseminate information
  - project and partners websites
  - partners contacts and mailing lists
  - contact the specific targets for each workshop
- Logistical organization:
  - Management of registrations
  - Management and support of keynotes
  - Collection and publication of accommodations information, etc.
  - Selection of the adequate place to organize the conference
  - Organization of all the necessary logistics for the conference (i.e. computer and other materials, breaks and lunches, official dinner,etc.

4 AGENDA OF THE WORKSHOP

9.00-9.30	Participants welcome	
9.30-9.35	Welcome by the workshop host	Alexandros Deloukas – Attiko Metro
9.35-9.55	Presentation of the RESOLUTE project and objectives	Emanuele Bellini – UNIFI
9.55 -10.15	The Resilience concept applied to urban transport	Pedro Ferreira – COFAC
10.15-11.00	European Resilience Management Guidelines	Lila Gaitanidou – CERTH/HIT Pedro Ferreira - COFAC
11.00-11.20	Coffee break	
11.20- 11.40	Introduction to Collaborative Risk Assessment and Management Support System - CRAMSS	Jan-Paul Leuteritz - FHG
11.40-12.00	Focus Groups preparation	Jan-Paul Leuteritz - FHG
12.00-13.00	Lunch break	
13.00-14.00	Focus groups on CRAMSS	Jan-Paul Leuteritz - FHG
14.00-16.00	Parallel sessions	
	Individual Usability Tests on CRAMSS	Jan-Paul Leuteritz - FHG
	Workshop on ERMG application Game-based training	Emanuele Bellini - UNIFI
16.00-16.30	Coffee break	
16.30-17.20	Athens & Florence pilots	Alexandros Deloukas – Attiko Metro Mauro Vaiani – CDF
17.20-17.30	Drawing conclusions of the workshop	Paolo Nesi - UNIFI

5 FORMAT & OBJECTIVES OF THE WORKSHOP

The second workshop “Interactive workshop & training on European Resilience Management Guidelines (ERMG)” was organized within the framework of the RESOLUTE project on 19th October 2016 in Athens, Greece. The aims of this second event were to present RESOLUTE and its objectives to all the related stakeholders, as well as to open the discussion around the specific issues of European Resilience Management Guidelines and Collaborative Risk Assessment and Management Support System and to ease exchange of ideas on these issues both among project participants and with external local stakeholders. Moreover, the workshop aimed at the engagement of local stakeholders, Athens being one of the testing locations of the project.

More particularly, the workshop focused on:

- The Resilience concept applied to urban transport;
- Presentation and feedback on the European Resilience Management Guidelines (ERMG)
- Introduction to Collaborative Risk Assessment and Management Support System (CRAMSS);
- Gathering feedback on the Collaborative Risk Assessment and Management Support System via focus groups;
- Acquiring feedback on the Collaborative Risk Assessment and Management Support System usability via individual usability tests.

The 2nd RESOLUTE workshop, bringing together main local stakeholders such as: Critical Infrastructure managers, decision makers, first responders, as well as scientists involved in resilience and risk analysis from various disciplines, aimed at:

- Presenting the first version of the ERMG and gathering first impressions and feedback by the participants
- Gathering feedback on the CRAMSS in order to improve its development and usability
- Engaging stakeholders in the discussion for the CRAMSS requirements

The results and conclusions of this workshop will serve as a basis for the development, improvement and implementation of CRAMSS, engaging at the same time a number of external stakeholders in the RESOLUTE User Forum.

6 PRESENTATIONS

6.1 – Welcome

All participants to the workshop were in the first place welcomed by the local organizer of the workshop, Mr Alexandros Deloukas from Attiko Metro.

6.2 RESOLUTE project and objectives

Emanuele Bellini, UNIFI

The first project presentation aimed to present the main objectives and to “set the scene’ for the participants. The problems and issues leading to the need of RESOLUTE were described, as well as RESOLUTE five main objectives and main outcomes. Special emphasis was put on sustained adaptability and Functional Resonance Analysis Method (FRAM), with more explanations on what FRAM is.

The main expected outcomes of RESOLUTE were described, as well as the adopted approach in order to reach these outcomes.

The full presentation is available at: http://www.resolute-eu.org/files/Project_Bellini.pdf

6.3 – The Resilience concept applied to urban transport

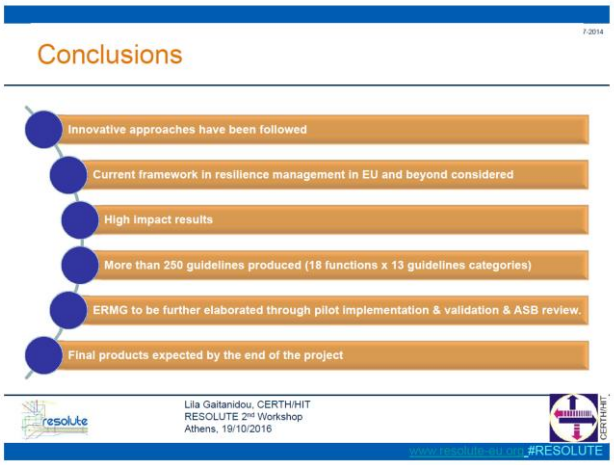
Pedro Ferreira, COFAC

The second presentation was a generic one concerning the concept of Resilience applied to urban transport. In this view, methods, models, the four principles of the FRAM & the FRAM functions were presented as well as their application to the urban transport system.

The full presentation is available at:

http://www.resolute-eu.org/files/Resilience.pdf

6.4 – European Resilience Management Guidelines



The work performed for the production of the European Resilience Management Guidelines was presented to the audience by Lila Gaitanidou from CERTH-HIT, in order to highlight the methodology and explain the use of ERMG.

In this view, the innovative approaches used to produce the ERMG were presented, the impact results were described, e.g. more than 250 guidelines produced.

It was also explained that the ERMG will be further elaborated through the pilot implementation & validation as well as the Advisory Stakeholders review, and the final version will be available towards the end of the project

The presentation is available on the project website: http://www.resolute-eu.org/files/ERMG_Gaitanidou.pdf

6.5 Introduction to Collaborative Risk Assessment and Management Support System – CRAMSS

Jan-Paul Leuteritz, Fraunhofer IAO

The Collaborative Resilience Assessment and Management Support System was presented to the audience by Jan-Paul Leuteritz from Fraunhofer IAO, as a basis for the Focus Group discussions. In this view, all the purposes of CRAMSS as well as the target groups and CRAMSS implementation plan were presented.

The presentation is available on the project website: http://www.resolute-eu.org/files/CRAMSS_Leuteritz.pdf

6.6 Athens & Florence pilots

In order to encourage the involvement of local stakeholders in the pilots, both Athens and Florence pilots were presented.

The presentations included the pilot aims and planning, the preparation phase and the ways in which the local stakeholders will be involved.

The presentations are available on the project website: http://www.resolute-eu.org/files/Athenspilot_Deloukas.pdf

7 FOCUS GROUPS

Focus Group discussion

7.1 FOCUS GROUPS ORGANISATION

Many experts in the field of emergency mitigation and resilience management participated in the workshop, providing an excellent opportunity to collect user requirements for the development of the CRAMSS (Collaborative Resilience Assessment and Management Support System), and – indirectly – also for the ESSMA (Emergency Smart Mobile App).

Therefore, four focus groups were held, each with 10 – 12 participants, plus a focus group moderator from the consortium.. An instruction manual was prepared by FhG and distributed to all moderators in order to steer their discussions. Each focus group had a group discussion, based on a semi-structured interview guide. They serve to empower the single participants to inspire each other when thinking about creative problem solutions or when defining their specific requirements. The main objective of the focus groups was to collect user requirements. It was investigated how the CRAMSS application needed to be designed in order to be helpful for users and to support raising the resilience of Urban Trasport Systems. Thus, the focus groups were defined around the following key questions:

(1) Which information (data) should the CRAMSS display?
(2) Which formats of specific information; what is this information used for?
(3) How would users interact with the CRAMSS?
    a. When?
    b. How often?
    c. How long?
    d. How much effort could be spent on data input?
    e. How should notifications be organized?
    f. Personalization (effort)
(4) Which information should be prioritized?

In order not to prime the participants with certain answers, it was decided not to include details or screenshots of the CRAMSS in the aforementioned presentations; instead, the presentations were focused on the role and the architecture of the CRAMSS.

21 RESOLUTE partners and 39 external experts participated in the group discussions, including Firefighters, police officers, operation control room and metro employees, officers and experts on security, engineering, etc.(+Instructors). The discussions were audio-recorded for detailed analysis. The analysis is not yet fully completed at this moment. However, up to now, 7 types of user decisions that should be supported by the data are collected, along with 15 categories of information to be displayed to the users and 15 additional hints of how to display or personalize such information.

7.2 FOCUS GROUPS RESULTS SUMMARY

7.2.1 Participants

Firefighters, police officers, control room and metro employees, officers and experts on security, engineering, etc.(+Instructors).

7.2.2 How to interpret the results

This document sums up what users said they would like to have as information to aid them in their daily work, particularly in decision making in critical situations. While reading these results it needs to be considered that:

- Not every piece of information may be equally important to the users or not even helpful at all. These are rather “wishes”, than confirmed “requirements”.

- The CRAMSS is meant to promote resilience. Many users in the focus groups are focused on critical events/emergencies and procedures. A balance should be reached between what they say they need and what the resilience approach would demand to be provided.
- Users answer as individuals. The CRAMSS is meant to provide information that is relevant to all its users. The CRAMSS should not provide information that would actually have to be provided rather by a particular tool, e.g. in the command central of fire fighters.

7.2.3 Additional input by CdF

The City of Florence has provided additional information that serves as similar as the inputs of the focus groups that is repeated here, in order to have all user "wishes" or "requirements gathered in one place:

What operators of the civil protection in Florence are currently missing is:

- real time info from traffic supervisor
- info about people connected to the municipal WiFi
- main public events

What is already included in the CP but needs to be improved?

- coordination with other authorities (specially with public utilities)
- cooperation with experts from the academic, industrial world
- access to historical data

This information has been used to make comparisons with the results obtained in Athens and, thus, to understand what the common priorities are across the pilot sites.

7.2.4 Athens Focus Groups - results

7.2.4.1 What information is needed?

Scenario: The participants were mostly thinking in terms of emergency scenarios (e.g. fire in the metro station); however, some of the information also relates to non-emergency preparation.

[*** = high priority; ** = medium priority; * = low priority]

A. Information about the critical event
    1) Location of event***
    2) Time of critical event, recovery time (estimate / time of arrival of units)*
    3) Type of event, further information (direction of fire (in a tunnel), Special circumstances (e.g. hazardous materials, etc.)***
B. Position, number, type, condition (operational readiness), general and contact information of: Ground units (/civilians):
    1) Emergency medical services / Firefighting [*Position of ground staff possible*]**
    2) Police **
    3) Persons in charge (liaison officers / water supply / manager of each station/scene): position and Contact information, incl. VHF channel*
    4) Utilities repair units*
    5) Passengers/ civilians: position, number (in system /train estimate according to peak / off-peak time), Condition: condition of injured people (can they still walk?), number of passengers /trapped, injured, passengers with special needs (e.g. wheelchair etc.)***
C. Information on the status of urban systems and general information

1) Traffic information (public transport), possible indicators: passenger volume (planned vs. actual; on which relations is reduced service; delays)***
2) Alternative transport means*
3) Traffic information (individual traffic)- position, direction, congestion, quickest route to arrive to location [*planned*]***
4) Utilities, hospitals, etc. (position, kind, operational readiness, contact information)**
5) Station Specific information: ventilation, Temperature (from temperature sensors in stations in case of fire etc.)*
6) Electricity supply in and around the station(s). → Available from the grid-operator. (Resolution: This part of the city is "on" or "off"). [*currently not available but reasonable to expect in the future*]. **
7) Access to camera surveillance (stations and trains, surroundings), live and also recordings (requested by police and control room operator)*
8) Meteorological information [*planned*]**
9) General information about Stations: floor plans / escape plans / fire systems of station / rescue ways / exits / shafts of tunnel, diagram or topographic visualization of all the underground lines / 3D-building-visualization*
10) Commonly agreed procedures*
11) Statistical data from past events (location, type of events: "What went wrong in last operations". "Where and when repetitive events (e.g. heart attack of older persons, etc.) are most likely to happen"?) [*Currently difficult as the police are not partners*]. However, a feature for marking incidents could help. *
12) News updates: Where are strikes / gatherings / marathons / … happening in the city? ***
13) Social networks analysis (Facebook, Twitter), Pictures or videos uploaded by users on site. Validity /reliability of information provided [*question: how to filter this information; how to show what's relevant?*]**
14) Estimation of Reliability of the Information (for operators, it is critical to know how trustworthy an information is. That may depend on the source of the information: is it a trustworthy source?) *[→ E.g. "reputation"]* **

D. Role and contact list integrated with a messenger:
   1) Roles and contact list: general Information of responsibilities, Jurisdictions, information graphs: chain of command, who is the process / maintenance owner of certain parts of the UTS (e.g. drainage on streets). [→ *Contacts list*]. ***
      Display hierarchy of decision-making? Who takes what decision? → [*Contacts list*]
   2) Direct communication with other parties / decision makers of other organizations, status of communication between organizations (did they get the message?), automatic notifications of others.* → *Not the task of the CRAMSS. But the CRAMSS should create awareness about events. (See A).*

7.2.4.2 Which decisions need to be made?

1. Which kind and how many units to dispatch
2. If special equipment is needed
3. If to send units inside a station /building or not (e.g. because it might not be safe), and how many of them
4. Open emergency gates, open water valves
5. Close lanes of road
6. Communication: Inform passengers (also on alternative routes), traffic police, etc.
7. Change route of buses
8. Operators: close station in case of smoke alert, etc. → this follows fixed procedures. If necessary, the operator makes one 110-call.

9. Security police department (not to be confused with counter-terrorism department): main job is “catch the bad guy”. Cases come through 110-calls and are dispatched to the respective departments.
10. It is not quite clear, who is the “Central Decision Maker” in Athens; possibly the governor of the region.

7.2.4.3 How should it be presented? What should be personalized?

- A map with events, updated automatically
- Displays for Police and Fire-fighters’ cars /vehicles, with maps showing location of what is happening and where, quickest route to arrive the routes
- Application on a smart device for first responders –to receive and send information
  (For first responders: detailed first information is very important)
- App for civilians with emergency button that will be delivered to the police etc.

Roles:

1. Different information according to roles (command and control, people on the scene..)
2. Same system with different credentials / user access that gives information regarding confidentiality,
3. Different access / roles for each organization (fire brigade, police, etc.).
4. Every organization should have also 3 different users roles:
   a. first responders
   b. unit leaders, and
   c. command and control (“super user”)
5. For the public side of the UTS, we could divide into
   a. Strategic level: local politics. This requires a macro-view of the situation.
   b. Operational level: this is where the CRAMSS should reside. Here, people could get a broader picture of the situation, using the CRAMSS.
   c. Tactical level: “station master” (at each station in the UTS; 8-hour-shifts). Very procedurally organized.

7.2.4.4 Which information should be highlighted or prioritized?

- Event: Type, Location, time,
- People in danger: location, number and condition (can they walk?),
- Rescue forces: location, number, and condition(operational readiness)
- Exits of station

7.2.4.5 Which notifications and in which way?

- By voice (verbal / different tones for different incidents)
- Banner at the top of app, with a yellow background etc.
- With an acknowledgement button. (Tone repeated in different variation (like an alarm) until acknowledged)

7.2.4.6 Other possible purposes of the CRAMSS

➔ Public servants sometimes do not take decisions that would apparently be correct, just because they are scared to do something out of the protocol, as they might be held responsible. Legal issues are out of the scope of the CRAMSS. Nevertheless, the CRAMSS may help individual actors understand the consequences of their decisions, and also to make possible legal issues visible.

➔ Communicate incidents to the societies. From operator to citizens. E.g. when detecting smoke / fire in a station: inform all citizens that the station is getting closed – divert traffic and citizen movement.

8 CRAMSS USABILITY TESTING

After the focus groups were finished and taking advantage of the participation of expert users, 10 usability tests were conducted on the currently existing mockups of the CRAMSS.

The objective of this user test was to find out how the current mock-up of the CRAMSS could be improved, based on feedback from representative users. The test served to find out if the users understood the overall layout, the basic interaction principles used and the currently foreseen features of the CRAMSS.

Two experts from FHG had prepared the test and had served as instructors. As in paper prototype testing, the test instructor presented the user with the respective page after each interaction (e.g. pressing a navigation button) or explained what would be happening on the screen after a certain action. Each test was filmed and performed by one single user, together with the instructor. The tests consisted of 11 test tasks and took between 15 and 40 minutes, each. The focus was on collecting qualitative information (formative evaluation), thus longer discussions were permitted.

The analysis of the results is, at this point, still under way. Nevertheless, several user errors were captured in the tests and can be used in the iterative improvement of the CRAMSS‘s user interaction concept. Some errors referred to the navigation, wording, or the representation of information (e.g. as percentages / diagrams).

9 CONCLUSIONS

The data gathered during RESOLUTE 2nd workshop constitutes an important contact and feedback from transport operators and stakeholders, in particular concerning the preparation of CRAMSS preparation and usability testing.

All feedbacks and informations gathered during the workshop will be analysed in the frame of CRAMMS preparation and development under WP5.

At the end of the workshop, RESOLUTE consortium fully reached the aim that was fixed for this workshop in terms of gathering data for next project phases.

APPENDIX 1: ATTENDANCE LIST

Name	First name	Organisation /Function
ALEXANTONAKIS	Nick	Metro Operator STASY/Gen.Director Operation
ANASTASAKI	Anna	Project Partner-Attiko Metro
APOSTOLOPOULOU	Efthymia	Project Partner-Attiko Metro
ARCHIMANDRITI	Georgia	Tourist Police Athens Head
BAKIRAS	Panagiotis	NA
BELLINI	Emanuele	Project Partner UNIFI
CHOULAKI	Ioanna	Hellenic Police Officer GADA
CHRISTAKIS	Dennis	NA
DASKALAKIS	Emmanouil	Hellenic Police Director Major
DELOUKAS	Alexandros	Project Partner Attiko Metro
DROSOU	Anastasios Dr	Project Partner
EFSTATHIOU	Panagiotis	NA
FERREIRA	Pedro	Project Partner
GAITANIDOU	Lila	Project Partner CERTH
GALANI	Artemis	General Secretary for Civil Protection Director
GKOTSIS	Ilias	NA
GRIFONI	Andrea	Project Partner Thales Italia
KAINTAS	Marios	NA
KALFA	Natalie	Attikes Diadromes SA
KALOFOLIA	Dimitra	STASY Emergency Officer
KARADIMITRIS	Athanasios	Fire Service (ESKE) Officer
KARAGKOUNIS	Evangelos	Metro Operator STASY
KRELIOS	Vasilis	STASY Station Master Director
KREOUZIS	Alexandros	Resilience Consultant
KYRIAZIDIS	Dimitrios	STASY System Maintenance Manager
KYRTSIS	Panagis	Piraeus Bank ETVA
LACHANIOTOU	Maria	City of Athens Resilience Responsible
LAKAFOSIS	Panagiotis	Hellenic Police Officer
LEUTERITZ	Jan-Paul	Project Partner FHG
LIDOR	Ofer	Project Partner FHG
MALAKATAS	Nicolas	Central Laboratory of Public Works G.Director
MALOUNIS	Alexandros	Fire Service (199SEKYPS) Officer
MENDOZA	Lucile	Project Partner
MICHALI	Marlen	Urban Public Transport OASA
MORELLI	Stefano	Project Partner
MPERNIDAKI	Eleftheria	NA
NAKOU	Fofo	Project Partner
PANAYOTAKOPOULOS	Demetrios	Project Partner
PAPAGEORGIOU	Elena	Project Partner
PNEVMATIKOU	Anastasia	Nea Odos Road Operator
RAPTOPOULOS	Nikos	Attikes Diadromes Road Operator

RASPINI	Stefano	Project Partner
RINIS	Dimitrios	Fire Service Officer
SAKAS	Vassilis	Athena Consultancy
SIAMETIS	Ioannis	Antiterrorist Police
SIMIAKAKIS	Christos	Fire Service Brigadier Athens Headquarters
SOLDATOS	Nikolaos	Tourist Police Officer
SOTIROPOULOU	Georgia	Hellenic Police Officer
SPANOS	Leonidas	NA
STEFANIS	John	STASY Deputy General Director of Operations
TASTANIS	Anastasios	Urban Public Transport OASA Chairman
THOMOPOULOS	Georgios	Metro Operator STASY Managing Director
TOURNIS	Stamatios	Resilience Consultant
TSAMOYRTZI	Konstantina	Greek-German Education Chamber
TSIGKAS	Konstantinos	Fire Service Officer
TZAMALIS	Dimitrios	NA
TZOVARA	Alexandra	
VAIANI	Mauro	Project Partner City of Florence
VASSILIADIS	Kostas	Attika Region Consultant
ZAMICHOS	Alexandros	Project Partner ITI
ZAMPA	Anna	Project Partner Attiko Metro
ZAVALI	Dimitra	Thales Hellas