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The REDACT project Educational Hub

Deliverable No: D.T3.5.1

GA T3 Implementation of REDA system (pilot studies)

COORDINATED BY:
The International Hellenic University

INVOLVED PARTNERS:

- International Hellenic University, TEICM (IHU-TEICM)
- Institute of Engineering Seismology & Earthquake Engineering - Research Unit of Earthquake Planning & Protection Organization (ITSAK-EPPO)
 - Democritus University of Thrace (DUTH)
 - Gebze Technical University
 - Ovidius University of Constanta
- Institute of Geology and Seismology Moldova

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Project Coordinator	Papatheodorou K. (IHU-TEICM)

DELIVERABLE CONTRIBUTORS:

IHU-TEICM: Konstantinos Papatheodorou, Kirtas Emmanuel, Panagiotis Kazakis, Gakos Paschalis, Panagopoulos Georgios, Ntouros Konstantinos, Theodoulidis Nikolaos, Klimis Nikolaos, Zulfikar Can, Dragos Toma-Danila, Dragos Vintila, Vladlen Cardanet

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Responsible Partner: International Hellenic University		
Approval	Emmanouil Kirtas	Signature  31.07.2023
Approval	Nikolaos Theodoulidis	Signature  31.07.2023
Approval	Nikolaos Klimis	Signature  31.07.2023
Approval	Can Zulfikar	Signature  31.07.2023
Approval	Dragos Vintila	Signature  31.07.2023
Approval	Vladlen Cardanet	Signature  31.07.2023
Approved by the Project Coordinator:	Konstantinos Papatheodorou	Signature  31.07.2023
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1. BACKGROUND OF THE DOCUMENT

1.1. SCOPE AND OBJECTIVES

Earthquake imposed crises, invoke the entire community including all of its structural components and put into test the operational capacity of services, their response efficiency and the response of the population, which strongly affects the dynamics and progress of response actions, both during the event and after that.

Response of the population is strongly related to the level of communication, of comprehending the situation and of being able and trained to respond. Scope of the deliverable is to investigate the reasons influencing Public behavior during earthquake emergencies and to offer solutions for improvement.

REDACt project EDU-HUB intends to capitalize on Educational material published by competent Authorities at National and Regional Levels and based on internationally recognized and widely acceptable principles, to constructively contribute towards improving public safety against Earthquake related risks.

This deliverable includes the development of a bulk volume of digital material which was used to build the Educational Hub web page (<https://www.redact-project.eu/educational-hub/>) and to disseminate the respective information to stakeholders, over presentations, posters and publications.

The International Hellenic University led this effort and partners contributed with data, information and translations.

1.2. RELATED DOCUMENTS

1.2.1. Input

Table 1. List of former deliverables acting as inputs to this document

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D.T.3.5.1	

1.2.2. Output

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2. EMERGENCY RESPONSE EFFICIENCY AND PUBLIC BEHAVIOR

Earthquake emergencies and disasters, involve the Public in a way that interaction between the Public and Civil Protection authorities, strongly affects the dynamics and progress of response actions, both during the incident and after that.

Earthquake imposed crises, invoke the entire community including all of its structural components including the operational capacity of services, their response efficiency and the response of the population, which strongly affects the dynamics and progress of response actions, both during the event and after that. Response of the population is strongly related to the level of communication, of comprehending the situation and of being trained to respond as will be presented in the following paragraphs.

During prevention and preparedness actions as well as during emergencies, civil protection authorities and emergency responders need to communicate with the Public and recommend actions for the Public to take in order to stay safe. To follow those recommendations there are two essential requirements: the public needs to understand them and to comply.

In many cases the Public, given the critical character of those moments, is not willing to comply and follow the recommendations (Carter et.al, 2013, 2014). Reasons for that behavior can be found in the lack of adequate education related to disaster mitigation and to crowd and personal psychology during crises. For those reasons and in order for efficient communication to be established between civil protection authorities and the Public, the public behavior needs to be understood and taken into consideration by emergency planners, when they develop and/or execute emergency response plans.

3. COMPLIANCE TO RULES AND GUIDELINES

Previous research suggests the existence of a crowd “irrationality” during emergencies, which causes “mass panic” (Le Bon, 1895; Bendersky, 2007), so emergency response strategies foresee the need to “control” the Public behavior even by withholding information regarding a disastrous event (Carter et.al, 2016).

More recent research (Stott et al., 2001) shows that developing response strategies based on the assumption of crowd “irrationality”, can be inefficient or even counterproductive. In fact, current theory suggests that crowd behavior is usually “normal” and “mass panic” is very rare (Feinberg and Johnson, 2001; Cornwell, 2003; Drury et al., 2009a & b).

Moreover, recent findings suggest that during emergencies, public behavior can’t be pre-determined because it is shaped by the way civil protection authorities (including emergency responders), manages the event (Carter et.al. 2018). To further improve public response efficiency, the same research suggests that, responders should demonstrate their respect to

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Public needs and clearly understand the impact their behavior has on Public response and moreover, that authorities should be develop effective communication strategies designed to enhance public compliance and cooperation.

Additionally to those and in order to comply, the Public needs to comprehend the recommendations and/or instructions. According to the 2019 update of “Crisis & Emergency Risk Communication”(U.S. Department of Health & Human Services), comprehension of instructions is a matter of how people perceive and process information during crises. According to the document, there are actual four stages of processing this information: message simplification, holding on to existing beliefs, looking for additional information & opinions, belief in the first message! So, the proposed response to the needs and constrains of the public, strategies need respectively, to use simple messages, to use credible resources to provide the messages, to deliver consistent messages and to release accurate messages as soon as possible.

Comprehending messages during a crisis, is also related to mental states of people with the main states posing as psychological barriers (CERC, 2019), which include uncertainty, fear and anxiety, hopelessness and helplessness, denial and panic.

Uncertainty, is related to the disastrous event extend, impact etc. To reduce uncertainty, the public needs adequate and reliable respective information, coming from credible resources.

Fear and anxiety. It can be related to the event itself but also to its impact on persons and assets of interest.

People need information but although event related information can be delivered publicly by competent authorities, there’s personal information (e.g. whereabouts and condition of family members and/or of assets) which must be acquired with own resources. In this case guidelines and recommendations can be delivered as a Prevention and Preparedness action to them.

Hopelessness and Helplessness. Reduction and/or elimination of those sentiments that may appear during a crisis, must be an essential communication target.

Information provided as described above and targeted education helping to process this information and come to credible conclusions, must be provided as a Preparedness action. People feel helpless when they feel powerless to overcome their problems on their own, so they need support to develop response skills, make decisions and act efficiently during a crisis.

Denial or refusing to acknowledge the impact of an earthquake event due to a variety of possible reasons including the lack of certified information, the perception or hope that the situation is much better than it appears to be, misunderstanding received messages, or other personal reasons. What is necessary in this case is the verification of the fact that warnings issued are based on reliable and accurate information and respond to real problems. To that end, people may need confirmation by their leaders, information about how the rest of community members is processing this information and education, to comprehend the risk at its real level.

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Denial can also be attributed to risk perception. Many times, people tend to expose themselves to risks for many reasons mainly related to their personal interests and experience and their concerns. People voluntarily undertake the risks because they consider that they can control them (e.g. I'll stay away from building facets therefore I can walk a few km to reach my parents), they believe that they are familiar with them (e.g. I know the way, I've been there and done it many times, nothing's going to happen) or they consider the risks as reversible (e.g. I'll return if there's any problem).

Panic has been covered in previous paragraphs. In short, "mass panic" is very rare or does not exist at all.

What can be inferred by the previous paragraphs is that, to improve Public response the necessary factors include:

- Understanding the psychology of warnings. It is needed to develop efficient dissemination plans and therefore, this part mainly concerns response planners.
- Dissemination of reliable information regarding the event, its characteristics and impact, coming from a credible resource (a state authority or a renowned organization) is needed.
- Provision of additional information related to personal concerns related to persons and or assets.
- Education to process the information and to comprehend the risks.
- ..and to achieve all that, a communication strategy targeting at both emergency planners and the Public!

This short list defines the targets of developing the REDACT Educational Hub, which aims at suggesting ideas and solutions to earthquake emergency response problems and receive feedback from the stakeholder community; especially from competent authorities who may (or may not) adopt and elaborate on the proposed solutions.

4. UNDERSTANDING THE PSYCHOLOGY OF WARNINGS - SOCIAL VULNERABILITY AND THE REDACT EDUCATIONAL HUB

Denial or public compliance to recommendations and/or instructions is a key factor in preventing the public of exposing themselves to risks, intentionally. To identify motivation and the reasons causing such behavior, an understanding of which the Public's main concerns are during an emergency situation, is needed.

A "crisis" or "critical situation" is strongly related to the viewpoint of the one who is undergoing it (Habermas, 1975), which means that different people may have a different perspective on the same "critical situation". On the other hand, even though decisions are binary, (only one option is always selected and followed), under critical conditions decisions have to be aligned among all involved parties to minimize the threat.

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At the same time, the “right” decisions which will prove to be the most effective are the well informed decisions, which are based on event related information and provide “situational awareness” including all **subjects that concern the public**.

What concerns the public during an emergency can be expressed as the “social vulnerability”; a set of characteristics that include (Cannon et al., 2003) a person’s initial well-being; self-protection; livelihood and resilience; social protection and; the social and political networks and institutions.

Six levels of “social” vulnerability can be identified (Schneiderbauer and Ehrlich 2006): i) individual; ii) household; iii) administrative community; iv) cultural community; v) national and vi) regional.

When it comes to people, vulnerability is (Bankoff, 2004) “...*about people, their perceptions and knowledge. People’s idea about risk and their practices in relation to disasters constitute the sextant and compass with which they measure and chart the landscape of vulnerability*”. Accepting this idea means that, the perception of people and their feelings, values and beliefs during emergencies, should be the indicators followed when studying the public behavior and planning for emergencies.

Combining the previous paragraphs, leads to identifying the essential concerns the public faces during emergencies and therefore to identifying the main targets for improving public response capacity during those critical moments. These targets are related to social vulnerability levels 1 & 2 (individual and household) and include the personal, family and other persons of interest and owned assets safety as the prime concerns of people.

As is therefore evident, **the public needs situational awareness at different levels** including those **related to the event** itself as well as those regarding “the persons of interest” and assets.

Reliable information provided by real-time communication during critical moments can help the public to make informed decisions, to act responsibly and to prevent them of exposing themselves to hazards, in a way that leads to improving their capacity to respond efficiently to risks.

As communication during crises can’t be taken for granted (communication problems often occur), provisions for actions that support communication infrastructure viability should also be considered.

To that end, the required “situational awareness” should be provided in real-time by using a set of tools facilitating communication over data, since voice communication is usually unavailable due to overloading of telecommunication systems. Practice from previous events has shown that during emergency situations, communication over data may be feasible while voice communication is unavailable. A probable reason for this relies with the logical assumption that communication over data requires an extremely limited bandwidth as compared to voice

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communication so using it instead of voice communication, may impose a much lesser load to communication network thus preventing its collapse.

The REDACt project aims at providing support to minimize or eliminate is possible the aforementioned problems. The REDACt smartphone app has been designed and developed in a way to provide real-time event related information to the Public and receive, felt-reports and information, contributing in this way to improving public response.

The REDACt Educational Hub focuses at providing solutions to the rest of the aforementioned problems in order to help both the competent authorities and the Public to improve knowledge regarding key subjects presented in previous paragraphs and overall, improve Response efficiency. It capitalizes on Educational material published by competent Authorities at National and Regional Levels and based on internationally recognized and widely acceptable principles, to constructively contribute towards improving public safety against Earthquake related risks.

5. PROBLEMS IDENTIFIED DURING EARTHQUAKE EMERGENCIES

Additionally to the above, problems related to Public response during Earthquake emergencies as they were identified by competent authorities at National level were also considered. These problems (Sapountzaki, 2021) include:

- Panic
- Traffic congestion (traffic jams)
- Ignorance of geographical location of safe areas (refuge areas etc)
- Ignorance of the time (duration) they should remain in safe areas
- ... and of the possible routes to them.

Especially regarding the latter, we should consider that especially in large urban centers, there may be a large number of visitors who may not be familiar with state defined safe locations, so they definitely need guidance to reach them.

As already stated in previous paragraph, “irrational” mass panicking doesn’t exist. Panic reported, may be attributed to the instinct of self -preservation and can last until people have evacuated the buildings.

If such a condition remains, it should be attributed to the main concerns people have during emergencies, which are related to the inability to evaluate the event and its consequences in their real dimensions and is enhanced by concerns regarding their personal interests (as already explained).

Consequently, information combined with the ability to perceive the situation and in addition to receive personalized information regarding the status and whereabouts of persons and assets of “interest” could help reduce the reasons causing panic.

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Additionally to those, it's the concern for "persons of interest" (kids, parents, friends), intensified by the lack of communication and this is probably one of the reasons people expose themselves the risks, in order to establish communication in person and get the information they need. In the process, they crowd the streets or cause traffic jams in case they use their cars for access.

As far as the problems related to the location and routing towards safe areas are concerned, a navigation able map of those State defined safe areas can solve the problems.

The following paragraphs explain the reason for selecting the proposed solutions and the additional tools to help the public implement them.



6. COMMUNICATION: VOIP vs PTSN

As already stated, practice from previous events has shown that during emergency situations, communication over data may be feasible while voice communication is unavailable provided of course that the existing communication infrastructure is still operational at least partially. Reasons for this fact are briefly explained in the following paragraph.


Communication over data is based on the Voice over Internet Protocol (VoIP) which uses a data broadband connection instead of using analog signals to send calls to the Public Switched Telephone Network (PSTN).

During VoIP communication, audio is converted into data packets which are then compressed, thus further reducing the data volume transmitted over the IP network, while maintaining voice quality. Data compression is based on the use of available "codecs", each one with its own specifications and capacity (compression ratio, data quality). In general, two way communication over VoIP for 10 minutes can require as little as 25 to 50 Mb of data, depending on the codec used by the provider.

Additional benefits stemming from respective capabilities, include Group calls/Communication, chat integration, geographic location sharing even in real time, communication over any kind of electronic device (computers, cellphones, tablets). Using these capabilities and data communication, a user can communicate simultaneously with all "persons of interest" including family members, neighbors, friends, inform them about her/his status, receive information about their condition and exchange in real-time, their geographic location viewed on cellphone.

At this moment, there's a multitude of freely available smartphone applications, combined with free services that allow this kind of communication. Indicatively platforms that provide free software and services include Messenger  by meta platforms and Whatsapp  by WhatsApp LLC (for both apps, ANDROID and iOS versions exist), which provide both group communication and real-time geographic location sharing.

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At the same time, there are others as Viber  by Viber Media S.à.r.l., which can provide group communication and static geographic location sharing and Google Maps which can provide group real-time geographic location sharing.

To this multitude of available software and free services, more are expected to emerge during the next period, thus providing even more communication capabilities to the public.

Based on the above, an additional target of the REDACT Educational Hub content is to support and guide people through the process of developing their emergency response plans in order to facilitate efficient response, by using all available tools. Some of those tools are related to on-demand sharing real-time location data with persons of interest.

7. COMMUNICATE AND SHARE LOCATION USING FREE WEB SERVICES

As already explained in previous paragraphs, main concerns the public faces during emergencies include the whereabouts and condition of “persons of interest” and assets. Lack of this important information creates anxiety and motivation to ignore the risks in order to reach them physically. In the process, people and cars crowd in the streets thus blocking them and preventing free access to Civil Protection forces. For those reasons, the provision of additional information related to personal concerns related to persons and or assets is very important.

A key factor to this process, is to prefer using data for VoIP communication because it can help prevent the communication network of collapsing due to being overloaded. Moreover, existing software for VoIP communication can provide additional, very important capabilities for sharing the required, important, personal information.

There’s a multitude of freely available software and services for on demand communication over VoIP in most widely used operational systems including Windows, MACOS, ANDROID and iOS meaning that these apps can be used for VoIP communication by any kind of available platform (desktop PC, laptops, tablets, cellphones). The capability of sharing geographic location information makes some of them stand out from the rest. The most widely used of those applications include Whatsapp, Facebook Messenger and Viber, with the first two being capable of providing live location information and Viber to provide “static” location.

By providing the ability not only to locate someone (their exact location at a specific moment) but also to “track” them in real-time as they move and change places, sharing “live” location during emergencies, indicates that the persons “monitored” are in good condition and moving towards a safe area where they can be met. This capability is also provided by Google Maps.

In other words, sharing live location in real-time means that, members of the same group (family, friends) can actually monitor each other as they move towards safety, while at the same time they can exchange text messages or even talk over VoIP comms. This function can

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reduce or even eliminate anxiety regarding the whereabouts of “persons of interest” and in that way, remove the reasons for trying to reach those persons physically and be exposed to risks, in the process.

At the Prevention stage, people can create various communication “groups” with family members, friends, neighbors and pin them at the top of their list, in order for those groups to be instantly accessible. Members of respective groups can be family members, friends and even people who can somehow provide important information during an emergency; for example neighbors of elderly people who live alone, who can provide information about their condition and whereabouts or people who can provide information about assets (house, car etc).

Once these communication groups have been created and tested with all participants of each respective group, they can be accessed during an emergency (Response phase) for delivering and receiving the required information, with the entire process taking only a few seconds as explained in the following ANNEX I.

8. EDUCATION TO PROCESS THE INFORMATION AND TO COMPREHEND THE RISKS- THE REDACT EDUCATIONAL HUB CONTENT

Education to process the information and to comprehend the risks is one of the main requirements for improving Public response capacity, so a large part of the educational hub is attributed to providing targeted education, which capitalizes on guidelines issued and/or published by competent National authorities and adds some new ideas, tips and solutions to potential problems the public faces during emergencies.

A Slideshow with tips regarding the reasons the Public should be prepared to respond in Earthquake emergencies in line with state emergency plans, what and how to do it to mitigate the risks, and info regarding the content of the Hub, introduce the visitor into the essentials regarding earthquake disaster mitigation and the necessary participation of the Public in this effort (Fig. 1).

A second part of the introductory section follows (Fig. 1) with brief information regarding the problem of earthquakes in the area, the role REDACT project aims to play, and information regarding the funding Programme.

Links to competent at National level, State authorities follow, to allow for easy access to already published educational material.

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Rapid Earthquake Damage Assessment Consortium-REDACT [BSB 966]

Contract Nr: MLPDA 88712/26.06.2020

Deliverable D.T3.5.1: The REDACT project Educational Hub



Figure 1. The REDACT project Educational Hub structure (right). The introductory section with slideshows containing tips and advice, information regarding the earthquake problem in the area and links to competent at National level authorities, is enlarged (left side).

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The following section of the EDU-HUB focuses on helping the public to comprehend the risks. Information is provided in the form of a table, linking actual risks to the appropriate preventive, preparedness and response actions (Fig. 2).

The table is followed by a slideshow, based on already published educational material by the Hellenic Earthquake Planning and Protection Organization (EPPO), which again attempts to link risks to prevention, preparedness and response actions.

Comprehending the Risks

Risk	Prevention (actions before an event)	Response (actions during & after an event)
Falling objects	FIX tall furniture. Move heavy objects to lower places or fix them.	Get under a sturdy table. Protect your head and neck.
In house lifeline damage	Make sure that everything is in order and that you know where the main controls are.	Check electricity and GAS for problems. TURN supplies OFF before leaving the house.
Injury during EXITING the building	Check alternative exits in case the main is blocked. Practice exiting the building. Monitor and optimize the procedure.	Wait until shaking is stopped. Do NOT rush. Use only STAIRS to go out. Walk CAREFULLY away from building facades and old buildings
Lack of necessary tools/Lack of situation awareness	BAG a FIRST AID kit, a TORCH and a RADIO (keep your cell phone, a power bank and necessary papers near).	AFTER being outside and safe, use your cell phone to verify that you're ok and to share location with family. USE only DATA and pre-defined ways to communicate
Falling debris. Other Hazards (ie. electrical cables, fire etc)	PLAN the SAFEST route towards the Pre-Defined gathering location. Consider different starting points and alternative routes.	Walk away from building facades and old buildings to the pre-defined safe location, share location with family/friends, monitor their progress, STAY SAFE.

How to be SAFER – Things TO DO! Help yourselves and Help others as well!

Risk

Electrical wiring problems

Prevention (before the event)

Regular maintenance and repairs by qualified technicians. Know the location and operation of switches.

Response (during/after the event)

Prevention (before the event)

[Inside the House](#) learn more
 [Outside the House](#) learn more
 [Help others](#) learn more

Figure 2. The REDACT project Educational Hub structure (right). “Comprehending the Risks” section with a table linking risks to the appropriate preventive, preparedness and response actions followed by a slideshow with a respective content. It aims at helping the public comprehend the risks, plan and train to be ready to respond when necessary.

Educational material based on already published by competent authorities was used to compile brief lists of things people need to do before, during and after an earthquake as preventive, preparedness and response actions, inside and outside the house. Suggestions to help people in the neighborhood who may need help (elders, people with mobility difficulties) are also included (Fig. 3).

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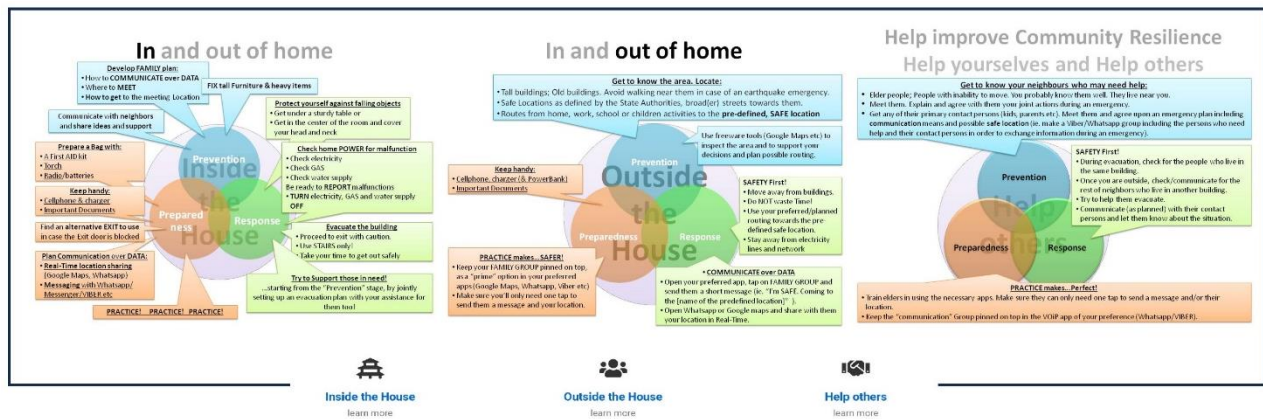


Figure 3. Things to do at Prevention, Preparedness and Response phases, inside and outside the house and also, suggestions to help people in need. The respective to each image links as they appear on the EDU-HUB, are shown at the bottom.

As already explained, the public needs situational awareness at the level of its interests and this awareness may come from information regarding the event, which is being provided by state authorities, by the REDAct smartphone app and other apps, but it also needs information regarding personal concerns (condition and whereabouts of persons, assets etc). This information can be acquired only by personal communication. Considering that voice communication demands may overload the comms network, the REDAct EDU-HUB promotes the use of VoIP communication over data to help protect communication networks from being overloaded and additionally to exchange important information which can't be communicated over voice.

For that reason, tutorials on how to acquire situational awareness by exchanging messages and sharing live geographic location using free services and apps, are also included (Fig. 4).

Finally, as an additional response to the problems reported by competent authorities at National level regarding the safe area location, a navigation able map of safe locations of the Region of Anatoliki Makedonia and Thraki is included, based on data provided by the Region of Anatoliki Makedonia and Thraki. Reverse geocoding performed on data, provided additional information such as the address, the name of a nearby landmark if one exists etc.

The map can be accessed over the Edu-Hub web page, so it is accessible using any available platform. Once a user selects a safe location, the respective information appears (name, address, municipality) and navigation can be implemented both using the web browser and the respective ANDROID or iOS app (Fig. 5).

The entire Educational Hub content was developed in English and translated into all partner languages: Greek, Turkish and Romanian.

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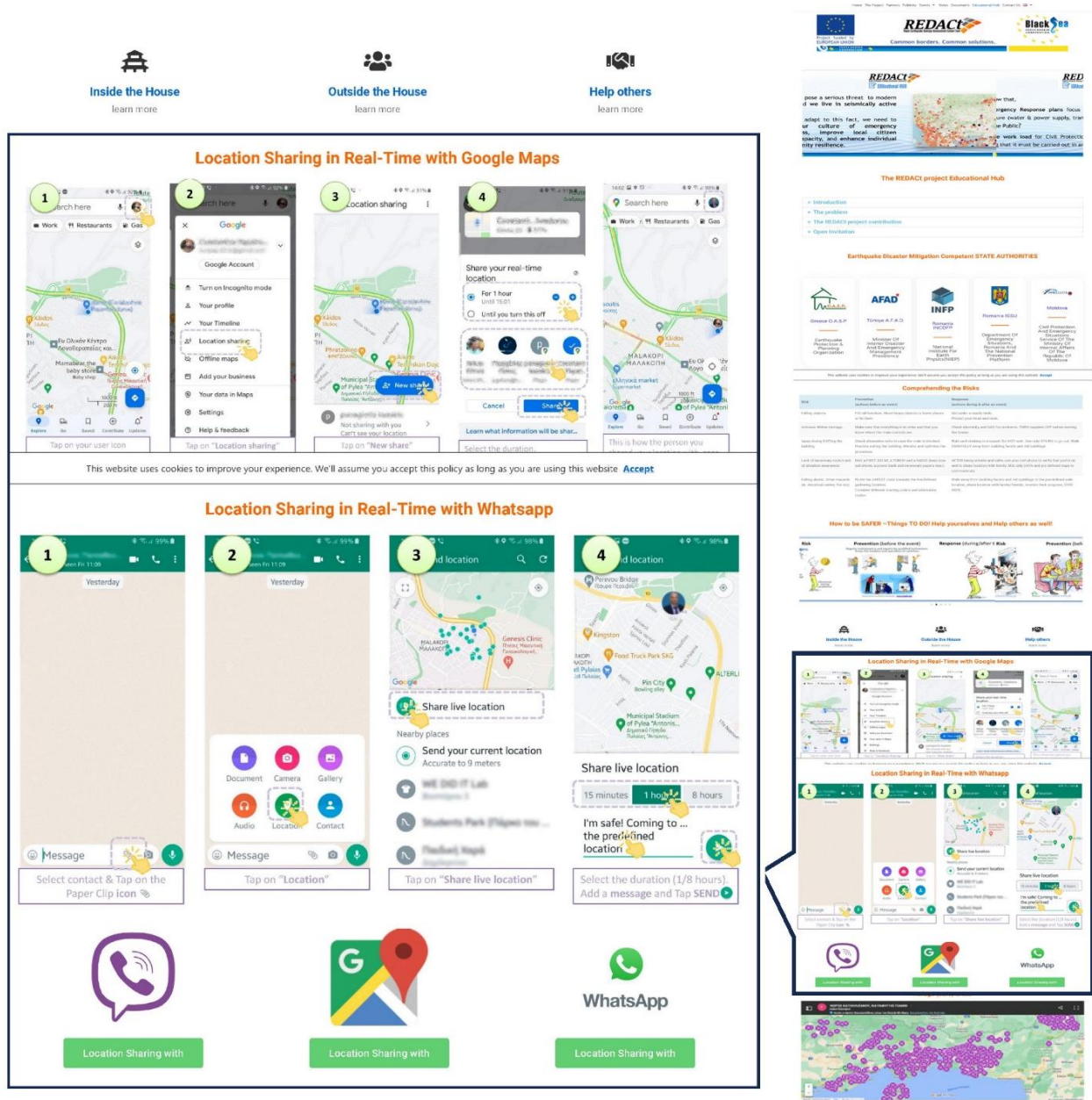


Figure 4. The REDACT project Educational Hub structure (right). Short tutorials on how to acquire situational awareness by exchanging messages and sharing live geographic location using free apps and services such as (indicatively) Whatsapp, Viber, Messenger and Google Maps are also included.

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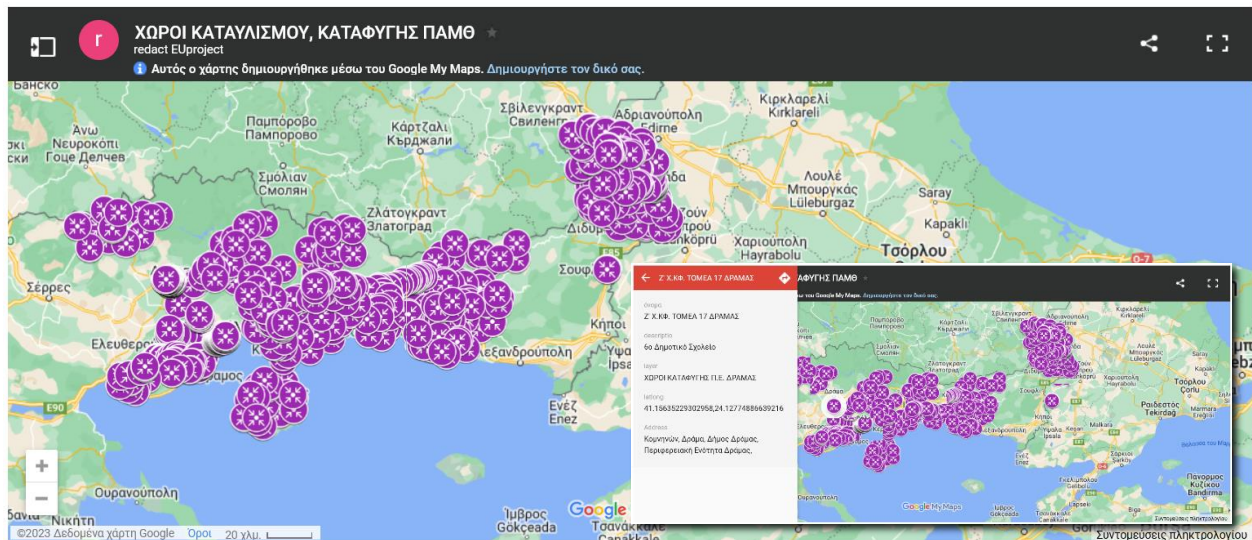


Figure 5. REDAct EDU-HUB, navigation able map of safe locations of the Region of Anatoliki Makedonia and Thraki. Data provided by the Region of Anatoliki Makedonia and Thraki. Inset shows information provided once one of the safe locations is selected. The red banner at the top include the name of the safe location and the white part, the rest of information including the address, coordinates etc. Clicking on the small arrow on the red banner with the name of the area, initiates navigation to that safe area.

9. POPULARIZED EDUCATION FOR EARTHQUAKE RISK MITIGATION

As already discussed, one of the reasons causing panic is the inability of the Public to assess earthquake risk at its real level so the potential impact of the event is somehow exaggerated into their minds.

To reduce the effect of this factor, REDAct provides a series of popularized books aiming at providing a knowledge base that can help the Public better understand the basic principles and the mechanisms from the earthquake to ground motion and to damage to structures.

At the same time, the REDAct EDU-HUB hosts tutorials and manuals related to the Rapid Earthquake Damage Assessment platform and to the REDAct smartphone app.

The Educational material has been developed in English and translated into Greek, Turkish and Romanian to cover all countries participating in the project and includes:

- Short Manuals & Tutorials
 - REDAS operational Guide (1 Eng + 3 translations)
 - Smartphone user manual (1 Eng + 3 translations)
 - Planning for Emergencies and for Safe Citizens (1 Eng + 3 translations)

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- Additional Educational Documents:
 - From Earthquake Focus to induced Damage (1 Eng + 3 translations)
 - Earthquake Damage to structures and Infrastructure (1 Eng + 3 translations)
 - Earthquake induced Geotechnical failures (1 Eng + 3 translations)

10. EARTHQUAKE PREPAREDNESS SELF ASSESSMENT-THE EDUCATIONAL HUB QUIZ

Educational material provided in the Educational Hub is complemented by a Quiz, aiming to help individuals assess their “current status” in terms of capacity to mitigate Earthquake risks at personal level. The questionnaire was built on Google docs and contains a number of questions related to all earthquake disaster mitigation stages as faced by a citizen.


There are questions related to preventive measures that should be taken, to preparedness actions that should have been made and response actions that must be taken in case of an earthquake emergency. Any individual can anonymously respond to quiz questions and receive a final evaluation according to the correct answers provided.

Assessing the status of preparedness is expected to motivate people to improve their condition as necessary.

Figure 6. REDACT Educational Hub Self Assessment QUIZ, regarding the capacity to respond efficiently to an earthquake emergency.


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3. Heavy objects in your library are placed on the bottom shelves? * 1 βαθμός




Yes
 No

8. Do you have basic first-aid knowledge? * 1 βαθμός



Yes
 No

4. Can you rapidly shut down water, electricity and gas supply? * 1 βαθμός



Yes
 No

9. Have you informed prior to this test about what to do in case of an earthquake? * 1 βαθμός

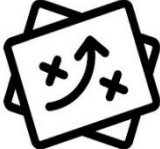
Yes
 No

5. The beds are located in safe areas, without any objects possibly falling on them or near windows? * 1 βαθμός

Yes
 No

10. Do you and your family have an emergency plan in case of an earthquake? * 1 βαθμός

This should refer to how your family should react during and after an earthquake, responsibilities, meeting point after the earthquake or means of communication.




Yes
 No

6. Can you tell in 5 seconds which is the safest place in case of an earthquake, in your home, work-place or school? * 1 βαθμός

Yes
 No

7. Do you have a functional fire extinguisher in your home? * 1 βαθμός



Yes
 No

Age *

Under 14 years
 14 - 18 years
 19 - 25 years
 26 - 34 years
 35 - 50 years
 51 - 70 years
 Over 70 years

Gender *

Female
 Male

Last graduated school level *

University - PhD or PostDoc
 University - Master
 University - Bachelor
 High school
 Gymnasium
 Primary
 Άλλο: _____

Involvement in Earth Sciences *

No
 Yes - mainly in seismology and earthquake engineering
 Yes - but not so much earthquake-related

Identification data

Country of residence *

Επιλογή ▼

City

Η απάντησή σας _____

Figure 7. REDACt Educational Hub Self Assessment QUIZ, regarding the capacity to respond efficiently to an earthquake emergency. The Quiz is based on basic guidelines published by major competent at National level Organizations including the Hellenic EPPO and the Romanian National Institute for Earth Physics (NIEP).

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ANNEX I

Tutorials on how to communicate using VoIP services and free apps and services to send and receive messages and share geographic location using some of the most widely used applications are given in the next pages.

Tutorials have been based on guidelines and manuals provided by the respective developers as these are available from their respective web sites.

A different, less “official” format has been selected for the ANNEX I material in order for it to be more pleasant and thus more appealing to the stakeholders.

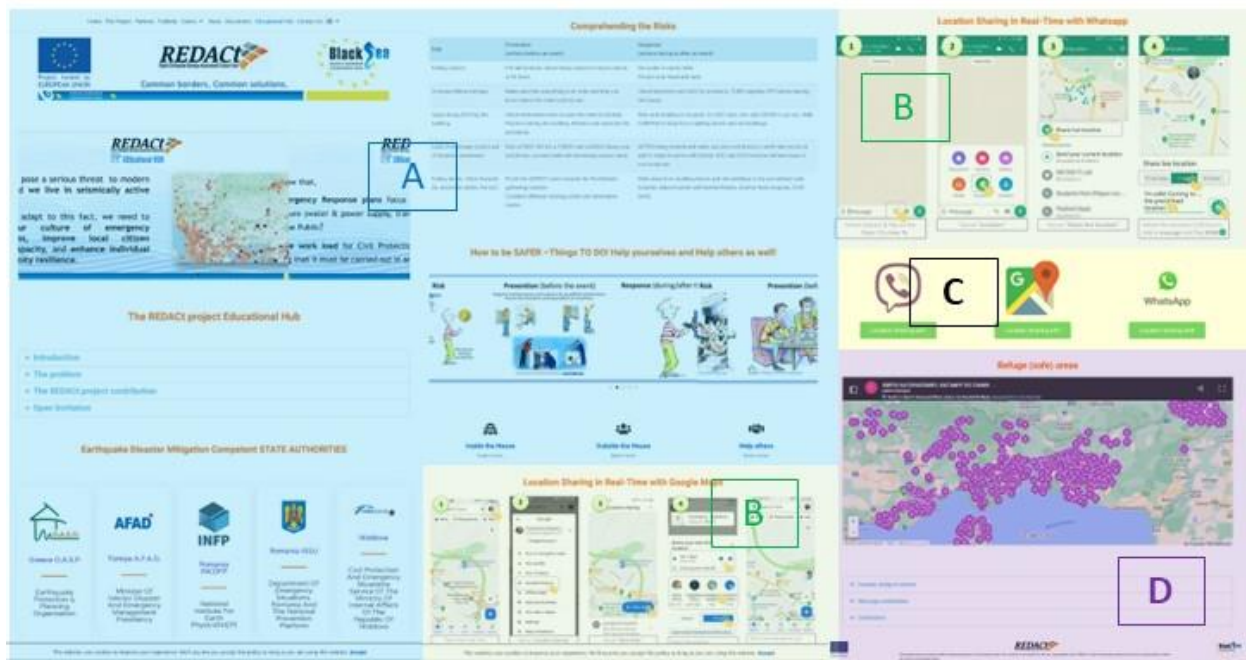


Figure 8. The REDACT Educational Hub web page. Blue area (A) is attributed to providing education regarding the reasons for taking preventive and preparedness measures and the appropriate, respective to various risks, response. Part B (green area) provides short tutorials on how to on demand, exchange messages and live geographic location. Part d (purple area) contains the map of state defined, safe locations of the Region of Anatoliki Makedonia & Thraki.

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Group communication and Live Location sharing using WHATSAPP



How to use live location

[<https://faq.whatsapp.com/android/chats/how-to-use-live-location/?lang=en>]

The Live Location feature allows you to share your real-time location for a specific amount of time with the participants of an individual or group chat. You can control whether and how long to share your live location. You can also stop sharing your live location at any time. Once stopped or expired, your live location is no longer be shared. Individuals who you shared your live location with will continue to see the location you shared as a static thumbnail image, and can tap the image to see your last updated location.

This feature is **end-to-end encrypted**, which means no one can see your live location except the people you shared with.

Note:

You can disable location permissions for WhatsApp at any time by going to your phone's Settings > Apps & notifications > Advanced > App permissions > Location > turn off WhatsApp.

Alternatively, if you recently opened WhatsApp, you can go to your phone's Settings > Apps & notifications > WhatsApp > Permissions > turn off Location.

Share your live location

1. Enable location permissions for WhatsApp in your phone's Settings > Apps & notifications > Advanced > App permissions > Location > turn on WhatsApp. Alternatively, if you recently opened WhatsApp, you can go to your phone's Settings > Apps & notifications > WhatsApp > Permissions > turn on Location.
2. Open an individual or group chat.
3. Tap Attach > Location > Share live location.
4. Select the length of time you'd like to share your live location. Your live location will stop being shared after the selected amount of time. Optionally, add a comment.
5. Tap Send.

Stop sharing your live location

1. Open the individual or group chat.
2. Tap Stop sharing > STOP.

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Stop sharing your live location in all chats and groups

1. Tap More options > Settings > Account > Privacy > Live location.
2. Tap STOP SHARING > STOP.

Location sharing with

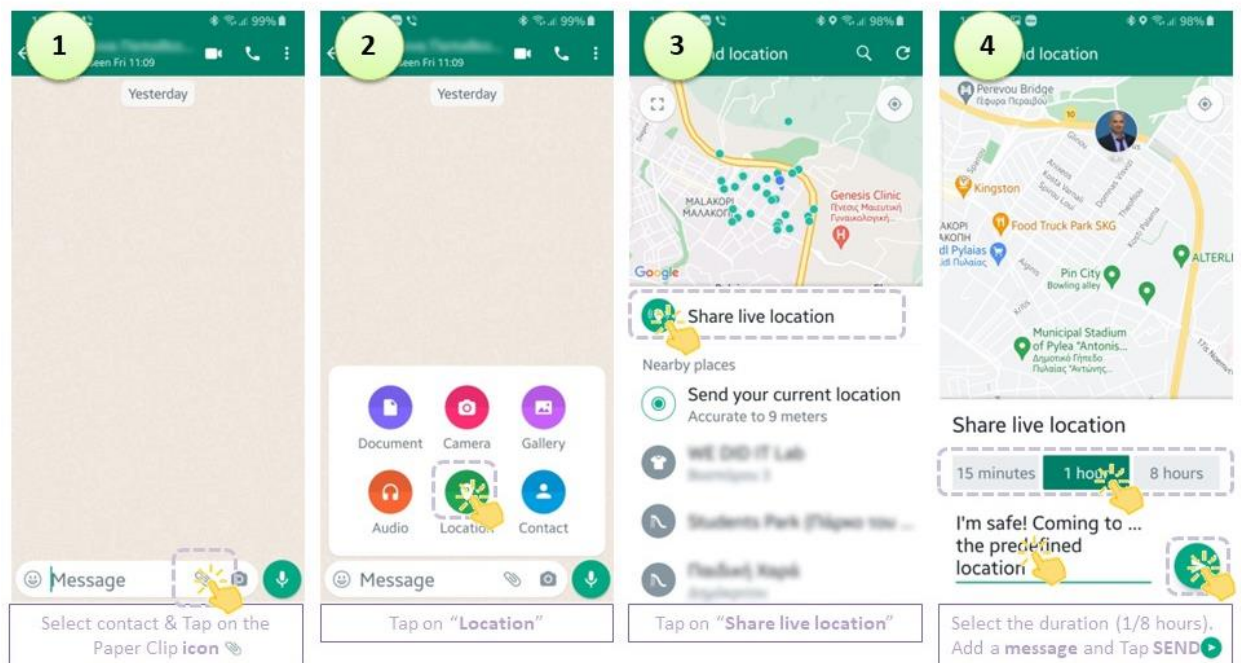


Figure 9. Location sharing using Whatsapp. A four step process taking a few seconds to provide and receive important information as Live location and message exchange.

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GROUP communication and location sharing with VIBER



VIBER is a platform providing communication for free (<https://help.viber.com/en/>).

Comment: There are also options for paid services but in our case, the freely provided services are sufficient.

VIBER can be downloaded from Google Play and Apple Store.

How to Set Up a GROUP for instant communication

1. Open Viber on your Phone.
2. Tap on Chats.
3. Tap Compose (Android)/(iOS)
4. Tap New Group.
5. Select the contacts you would like to form a group with.
6. Tap Done (iOS) or the Checkmark (top corner) to confirm.
7. Group Chat will be selected by default.
8. Tap on the Camera to add a group icon.
9. TAP and HOLD on the Group icon and PIN this Group “at the TOP”, to have direct access to it at any time.

How to send your location to the Group members

1. Tap on Group icon
2. Tap on the three dots at the bottom right.
3. Tap on Send Location (the “pin” icon).
4. Your location appears on a Map
5. Tap “send location”



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Group communication Live Location sharing in Messenger



Facebook Messenger is an app that permits communication over the Web. It is a free service that uses data and Voice over Internet Protocol - VoIP (<https://www.messenger.com/>)

To **START** sharing your live location via Facebook Messenger:

1. From **Chats**, open the conversation you want to share your location with.
2. Tap  then Location 
3. Tap **START SHARING LIVE LOCATION** (the big BLUE button)

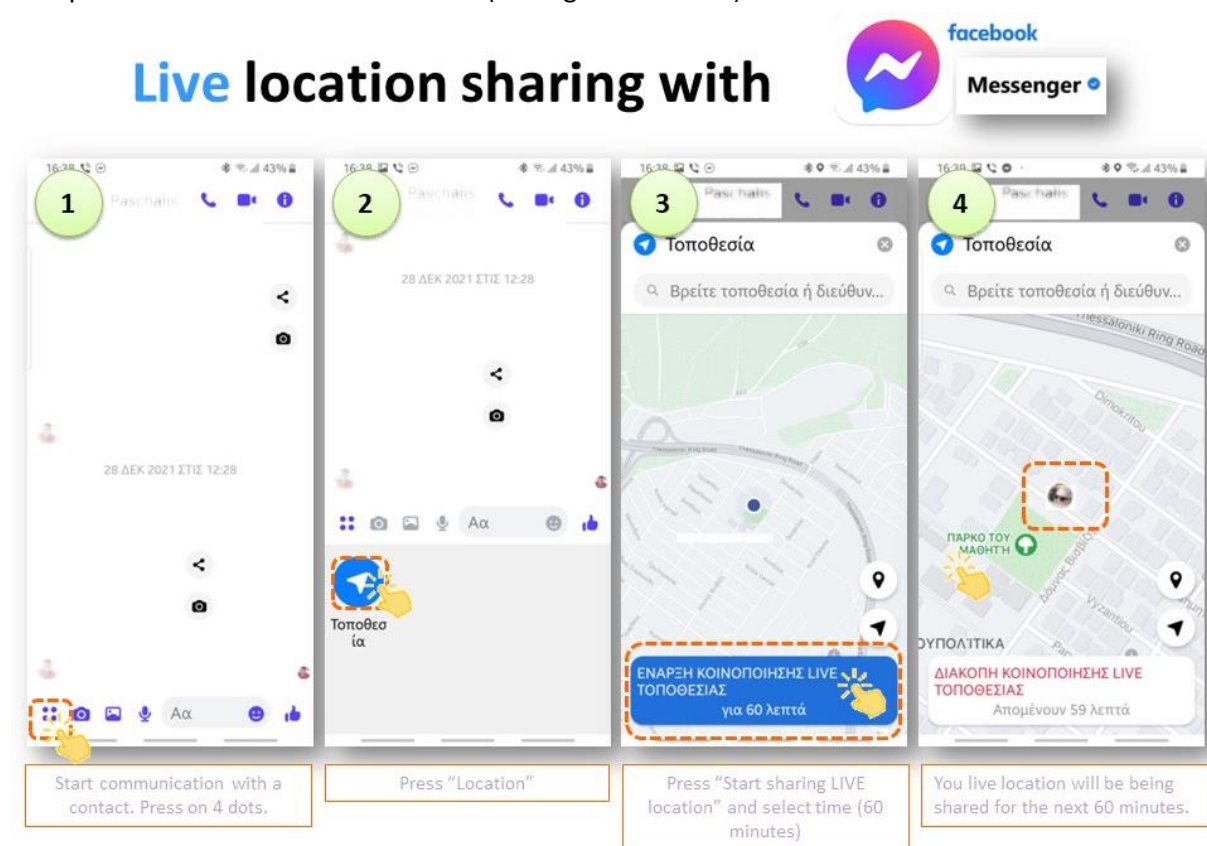


Figure 10. Location sharing using Messenger. A four step process taking a few seconds to provide and receive important information (live location and message exchange).

To **STOP** sharing your location:

1. Open the conversation.
2. Scroll to the message where you sent your live location.
3. Tap **STOP SHARING LIVE LOCATION**.

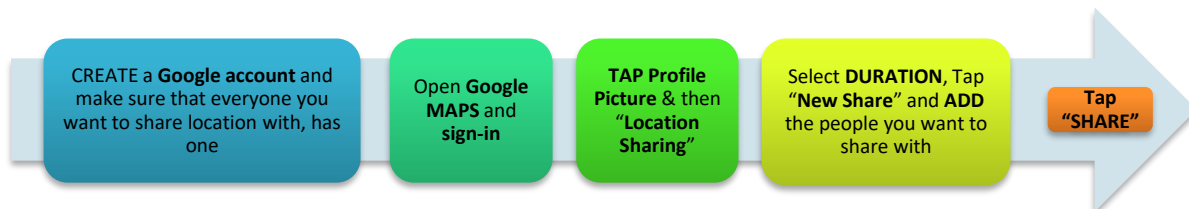
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Share location using GOOGLE MAPS

Share location with persons who have a Google Account using GOOGLE MAPS

(<https://support.google.com/maps/answer/7326816?hl=en&co=GENIE.Platform%3DAndroid>)

1. Create a Google account (<https://support.google.com/accounts/answer/27441?hl=en>).
2. Ask the persons you want to share location with, to make their own Google account. Add their Gmail address to your Google Contacts.
3. Make sure you have easy access to their emails (ie. Share location with them a couple of times and the next time you'll open it, Google maps will suggest their emails for location exchange).
4. On your Android phone or tablet, open the Google Maps app (Maps) and sign in to your account. Learn how to sign in.
5. Tap your profile picture (upper right corner) or initial Account Circle and then tap "Location sharing"
6. In the menu "Location sharing in Real Time", select the duration of location sharing by tapping on the respective option (1 hour or until de-activating sharing).
7. Tap "New share" and Add people by tapping on their profile icons of the person with whom you want to share your location. If asked about your contacts, give Google Maps access.
8. Tap Share.



A bit of Advice: Practice makes perfect! During critical situations, every second is precious. Practice and get yourself and your contacts familiar with the procedure of location sharing.

Share with a person who does NOT have a Google Account

To share your location to someone who does NOT have a Google Account or to share without using the Google Maps app, you can share your location with a link.

1. On your Android phone or tablet, open the **Google Maps** and sign in to your account. Learn how to sign in.
2. Tap your **profile picture** or **initial Account Circle** (top right) and then **tap Location sharing** and then **tap New share Add people**.
3. To copy your Location sharing link, **tap Copy to clipboard**.

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4. To share the link with someone, *paste* the **link into an email, text, or other messaging app**. People with this link can find your **real-time location for as long as you choose**, up to 24 hours.

Stop sharing!

1. On your Android phone or tablet, *open* the *Google Maps* app.
2. *Tap* your **profile picture or initial Account Circle** and then *tap* **Location sharing**.
3. *Tap* the **profile of the person** you don't want to share your location with anymore.
4. *Tap* **Stop**.

Share your estimated time of arrival

When you navigate by car, foot, or bicycle, you can share your destination, estimated arrival time, and your current location. The person you share this information with can track your location until you arrive.

1. On your Android phone or tablet, open the Google Maps.
2. Set a destination. (Learn how to navigate to a place).
3. **After you start navigation**, tap **More** (bottom of screen with the instructions) and then **Share trip progress**.
4. Tap the **profile of the person** with whom you want to share and then **Share**.
5. When you reach your destination or stop navigation, you stop sharing your location.
6. To stop sharing before you arrive: Tap More More and then Stop sharing.

Get someone's location/Find someone's location

When someone **shares their location** with you, you can find them on your map.

1. On your Android phone or tablet, *open* the Google Maps app (MAPS).
2. *Tap* your profile picture or initial Account Circle and then *Location sharing*.
3. Tap the profile of the person you want to find.
4. To update the person's location: Tap on a friend's icon and then *More, More* and then *Refresh*.

Ask for someone's location

If you shared your location with someone or they shared with you in the past, you can **ask for their location** in Maps.

1. On your Android phone or tablet, open the Google Maps app Maps.
2. Tap your profile picture or initial Account Circle and then Location sharing.
3. Tap a contact who shared with you before.

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4. Tap Request and then Request. After you ask for your contact's location, they get your email address, a notification and can:

- View your profile to verify who you are.
- Share their location with you.
- Ignore your request.
- Block you. You can't ask for their location anymore.

Tip: To find someone's location, you can also ask the Google Assistant.

5. Case B. After you have activated sharing YOUR location with someone else, a requester appears **on their screen** informing them that they are NOT sharing their location with you and asking them if they want to share. If they choose to share, they only have to tap on the requester and then tap on share.

Hide someone's location

If you don't want someone's real-time location on your map, you can hide it. You can turn their location back on at any time.

1. On your Android phone or tablet, open the Google Maps app Maps.
2. On the map, tap their icon.
3. At the bottom, tap More More.
4. Tap Hide from map.

Tip: You can permanently block someone's location from your map. Learn how to block another person's account.

Show (turn on) someone's location you've hidden

1. On your Android phone or tablet, open the Google Maps app Maps.
2. Tap your profile picture or initial Account Circle and then Location sharing and then More and More.
3. Tap Hidden from map and then More and More and then Show on map.

Deny or block a location request

If you don't want to share your location with someone in Google Maps, you can:

1. Deny the request: Tap No. Your location isn't shared.
2. Block the requester: Tap Block. Your location isn't shared and the requester can't ask for your location anymore. When you block someone, it affects how they can contact you in other Google products. Learn more about blocking users.

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Unblock someone

1. On your Android phone or tablet, open the Google Maps app Maps.
2. Tap your profile picture or initial Account Circle and then *Location sharing*.
3. At the top, tap More More and then Blocked users.
4. Next to the person you want to unblock, *tap Remove* and Remove.

Location sharing with Google Maps

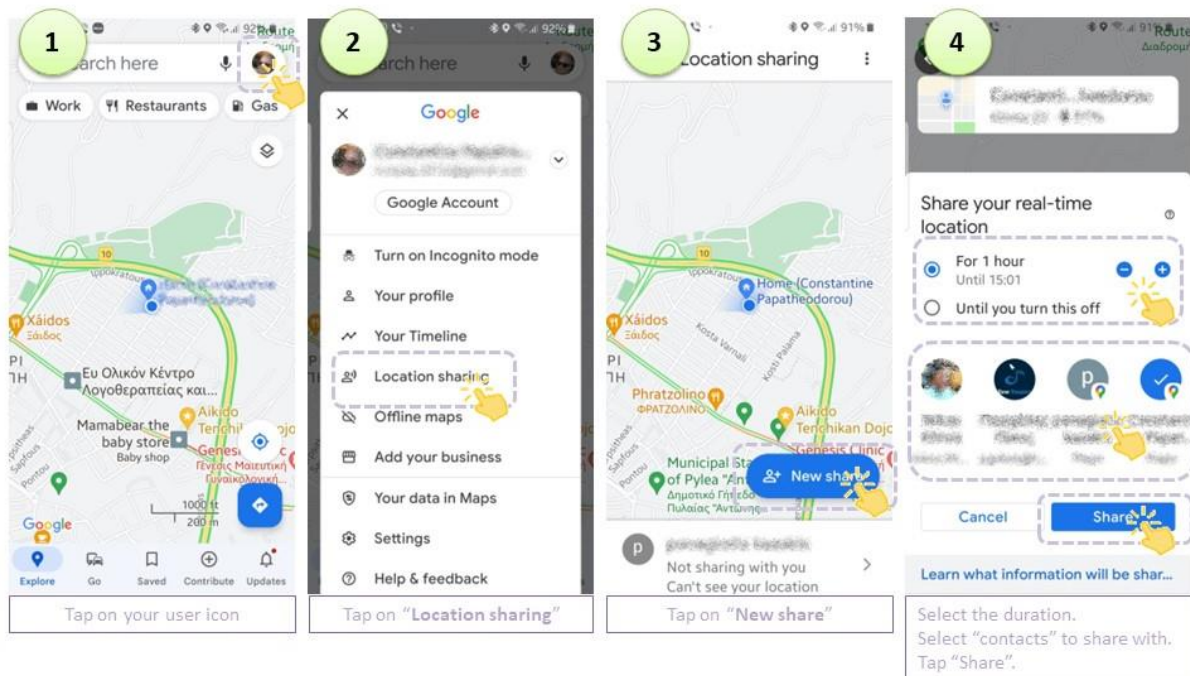


Figure 11 Location sharing using Google Maps. A four step process taking a few seconds to provide and receive important information.

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