



# engage

Engage Society for  
Risk Awareness and Resilience

## Deliverable 5.3 – Contributions to Sendai, Policy and Standardization

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**Abstract:** ENGAGE aims at linking the informal resilience naturally inherent in citizens with the formal work of authorities to prevent, prepare for, respond to, and recover from disasters. It brings together 14 partners from 8 countries aiming to show how individuals and local practices can interrelate effectively with planned preparedness and response, practitioners, and technology.

This deliverable summarizes the work that ENGAGE has carried out in relation to policy on the topics of crisis communication and involving spontaneous volunteers in disaster management. This document describes the methodology from which the policy recommendations and subsequent policy briefs were formulated, as well as the activities that were carried out to disseminate the recommendations and ensure that feedback from a wide range of stakeholders was obtained. This document also outlines the content of the ENGAGE white paper, delineates the manner in which the ENGAGE outputs contribute to the Sendai Framework for Disaster Risk Reduction, and identifies relevant standardization instruments. This deliverable also includes conclusions and recommendations for ways that this work may be carried forward or developed further in the future.

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## Executive summary

This deliverable describes the work that ENGAGE has carried out in relation to policy, which has involved the drafting of two policy papers synthesized from ENGAGE research and results, as well as the development of a white paper which outlines the work of ENGAGE and how the project's outputs contribute individually and collectively to enhancing the overall resilience of societies.

This deliverable then outlines the approach and methodology that was employed in the development of these policy outputs- which have included a review of ENGAGE deliverables, consultations with project partners, requests for feedback from external stakeholders, and subsequent revisions of the content of the policy papers. The approach that was taken when drafting this deliverable- which has included an analysis of the priorities of the Sendai Framework and the United Nations Sustainable Development Goals, contributing to the mid-term reporting of progress towards the Sendai Framework priorities, will also be described in detail.

An overview of the content of each of the policy papers and the white paper- which will include recommendations as well as policy implications for the former and a presentation of the overall structure of the latter- will be provided. This deliverable will also outline all the activities that have been carried out to increase the visibility of these outputs and/or garner feedback on them- including presentations at conferences, social media campaigns, and policy roundtables. This deliverable will also identify relevant standardization instruments that ENGAGE could contribute to, and the activities that have been carried out as a part of this work.

Finally, this deliverable culminates in conclusions that have been derived from the policy work, which include an identification of potential directions both in the field of policy as well as in research.





# 1 INTRODUCTION

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## 1.1 PURPOSE & OBJECTIVES

The objectives of this document are as follows:

- To outline the approach that was taken to developing the ENGAGE policy recommendations on communicating to citizens in emergencies and involving spontaneous volunteers in disaster management, as well as the methodology that was used to refine them to their finalized state.
- To illustrate how the outputs of ENGAGE, including the policy papers and the white paper, contribute to the Sendai Framework for Disaster Risk Reduction and the United Nations Sustainable Development Goals.
- To identify ways that the policy work of ENGAGE could be carried forward in the future on research, operational, and policy levels, which will include the identification of relevant standardization instruments that the ENGAGE recommendations could contribute to.

## 1.2 INTENDED READERSHIP

This document has **six groups of intended readers**. The **first group** is the ENGAGE Consortium, composed of 14 partners from 8 countries, and the **second group** is the European Commission (EC), and the project reviewers. The **third group** is policy makers on local and regional levels, to whom our policy recommendations are focused as they not only are responsible for implementing policies that shape the future of their regions, but for identifying the most effective means of preparing for and responding to disasters that may impact the safety and infrastructure of their region. The **fourth group** is comprised of public authorities, first responders, NGOS, civil society organizations, and other practitioners, as these policies would be incorporated into their disaster management and planning on an operational level. The fifth group is comprised of national and EU decision-makers, who have influence in regard to the wider frameworks in which the ENGAGE policy work fits. The **final group** is the general public, to whom our recommendations and the overall outputs of ENGAGE are particularly relevant, as a driving point behind our work was to not only to enhance their collaborations with first responders and public authorities but also to increase their awareness of the processes that impact them.

However, it should be noted that as one of the main aims of the ENGAGE policy work is to find ways to promote and enhance interdisciplinary collaboration, the policy briefs and the white paper should not be seen as solely targeting one stakeholder group (e.g policy makers), but rather as a means of identifying common goals and objectives that can be collectively worked towards by each stakeholder group, organization, and individual utilizing their respective backgrounds and expertise.

## 1.3 STRUCTURE OF THE DOCUMENT

This document is structured in five chapters:

**Chapter 2** maps how the ENGAGE outputs contribute to the Sendai Framework for Disaster Risk Reduction and the UN Sustainable Development Goals. **Chapter 3** provides an overview of the content of the two policy papers and the white paper and outlines the methodology that was adopted to develop them. **Chapter 4** focuses on describing the activities that have been carried out to enhance the visibility of and receive feedback on, the policy papers and the white paper. **Chapter 5** identifies relevant standardization instruments that ENGAGE could contribute to and finally,



**Chapter 6** provides conclusions that have been derived from the policy work and implications for possible future work.

## 1.4 RELATIONSHIP WITH OTHER DELIVERABLES AND WORK PACKAGES

The outputs which are outlined in this deliverable build upon the work of the partners that have been carried out in other work packages. In particular, this deliverable is strongly related to:

- **D1.3- Communication, Social Media, and Societal Resilience:** This deliverable allowed for an understanding of the communication needs of citizens, which are then built upon in terms of recommendations for new directions to better address them in the policy brief on communicating with citizens.
- **D2.1- Expectations and Needs to Improve Societal Resilience:** When drafting the policy brief on spontaneous volunteers, this deliverable assisted in gaining an understanding of the ways that spontaneous volunteers are currently perceived by emergency services and the obstacles that exist in regard to attempts to utilize the resources that they can bring to the table in the response phase of a disaster.
- **D2.2- Formal Solutions to Improve Societal Resilience:** This deliverable helped gain an understanding of the way that technology is used to manage/ encourage the contributions of spontaneous volunteers. New directions for ways that these technologies could be better utilized are included in the spontaneous volunteers policy brief.
- **D2.4- Existing Communication Channels and Guidelines:** In addition to outlining the state of the art in terms of communication, this deliverable illustrated the need for the adoption of a continuous communication strategy that takes into account the differences in the different phases of a disaster (e.g moving away from strategies which solely focus on “emergency” and “no emergency” situations). This deliverable also illustrated the need for taking steps towards ensuring that messages are adaptable to the different needs of citizens and the communication channels that they utilize to receive them. These needs are addressed in the policy brief on communicating with citizens.
- **D3.2- Initial Directions for Innovative Use of Communications and Social Media:** This deliverable helped in gaining an understanding of technologies, such as chatbots, that could be further explored in order to bridge the current model of communications with the more accessible, inclusive, and multidirectional model for which ENGAGE advocates.

## 1.5 LIST OF ACRONYMS AND ABBREVIATIONS

Table 1: List of abbreviations

Term	Abbreviation
<b>DoA</b>	Description of the action
<b>GA</b>	Grant Agreement
<b>CA</b>	Consortium Agreement
<b>Ki-CoP</b>	Knowledge Innovation Community of Practice
<b>KPI</b>	Key Performance Indicator
<b>PoC</b>	Point of Contact
<b>WP</b>	Work Package



Table 2: List of terms

Term	Explanation
<b>Knowledge Innovation Community of Practice (Ki-CoP)</b>	Community of Practice involving practitioners (e.g first responders, authorities, members of civil society organisations) and citizens supporting the project activity with the role of users and co-owners of its solutions. <sup>1</sup>
<b>Practitioner</b>	"Someone who is qualified or registered to practice a particular occupation, profession in the field of security of civil protection." <sup>2</sup>
<b>Societal resilience</b>	Initial definition: Intrinsic ability of organisations, communities, and society as a whole to adjust its functioning prior to, during, or following changes so that it can sustain required operations under both expected and unexpected conditions. <sup>3</sup>
<b>Teams</b>	Project collaboration tool hosted in Microsoft Teams

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<sup>1</sup> This explanation was taken from the DoA.

<sup>2</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/faq;keywords=/3156>

<sup>3</sup> Taken as a starting point as defined in the DoA: "Diverse understandings, we use this definition as an initial definition adapted from Hollnagel, 2019"



## 2 ENGAGE CONTRIBUTIONS TO SENDAI, THE UN SDGs, AND THE EU DISASTER RESILIENCE GOALS

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The ENGAGE project was designed to fit within a wider policy structure- which mainly refers to the Sendai Framework for Disaster Risk Reduction and the Sustainable Development Goals (SDGs)- both in regard to policy recommendations of the project as well as its research and outputs. However, contributions to the European Union’s Disaster Resilience Goals have also been outlined.

### 2.1 CONTRIBUTIONS TO THE SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION

The Sendai Framework for Disaster Risk Reduction was adopted in 2015 with the purpose of “substantially reducing disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries” (United Nations Office for Disaster Risk Reduction, n.d). In order to reach this goal, the framework established four priorities which outline concrete actions that can be taken on global, regional, national, and local levels to reduce disaster risk. The work of ENGAGE mainly contributes to Priority 1- Understanding disaster risk; Priority 2- Strengthening disaster risk governance to manage disaster risk; and Priority 4- Enhance disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation, and reconstruction.

**Priority 1** of the Sendai Framework states that “policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics, and the environment” (UNDRR, n.d). The ENGAGE Model for Assessing and Enhancing Societal Resilience contributes to this priority by providing first responders and public authorities with a means of gaining a more nuanced understanding of the ways individuals cope in the event of a disaster. For example, the model can assist in identifying what aspects could be targeted in order to enhance collaborations between citizens and authorities (e.g building trust by changing the way that information is shared when a crisis occurs) or to gain a better understanding of the ways that informal actors contribute to disaster response and recovery and how certain factors unique to each particular context influenced these contributions.

ENGAGE also seeks to contribute to this priority through our policy recommendations, which propose new directions for crisis communications. In particular, this set of recommendations urges policy makers on regional and local levels as well as first responders and public authorities to gain a better understanding of the diversity of citizen needs in terms of communication, which involves building relationships within the community, hearing their concerns, and understanding how they react in a crisis, and subsequently co-creating ways to communicate risk that are the most relevant for them.

**Priority 2** of the Sendai Framework advocates for developing a clear vision, plans, competence, guidance, and coordination within and across sectors in order to strengthen disaster risk governance. An important aspect related to this priority is facilitating the participation of stakeholders, which ENGAGE aimed to do by establishing our Knowledge and Innovation Community of Practice (Ki-CoP). The ENGAGE Ki-CoP is currently composed of 90 members from 25 different countries who represent the research community, practitioners, NGOs, first responders and citizens’ representatives. In addition to participating in webinars, workshops, and validation exercises, “the inclusion of the Ki-CoP in project activities ensured the validation and transferability of solutions, guidelines, and methods across different risk and disaster scenarios” (Moens, L., 2023). One particular example of this process was illustrated by the Ki-CoP members testing various versions of the ENGAGE Catalogue of Solutions.



The development of the Catalogue of Solutions is another means in which ENGAGE contributes to priority 2 of the Sendai Framework. The Catalogue of Solutions is hosted on the ENGAGE Knowledge Platform, and is comprised of a selection of tools, technologies, and guidelines for first responders and public authorities to make use of in order to strengthen collaborations with citizens within their particular contexts. The platform is designed to contribute to interdisciplinary sharing of best practice examples, which first responders and public authorities can then utilize as a source of inspiration that they can draw from when further developing their disaster management strategies and planning. According to the United Nations Office for Disaster Risk Reduction, developing such strategies “starts by delineating a common vision of the understanding of disaster risk, followed by the definition of guidelines and priorities to prevent the creation of new risk and reduce existing risk” (UNDRR, n.d).

**Priority 4** of the Sendai Framework indicates that “disaster preparedness needs to be strengthened for more effective response and ensure capacities are in place for effective recovery.” The ENGAGE policy recommendations on the topic of involving spontaneous volunteers in disaster management advocate for strategies to be put in place that not only optimizes their contributions in disaster response but strengthens learning structures in order to ensure that all stakeholders involved learn from previous crises and disasters in order to be better prepared for future ones.

The work of ENGAGE also contributes to a few of the identified targets of the Sendai Framework for Disaster Risk Reduction. Namely target D and target G. The contributions of ENGAGE to these targets have been reported in the mid-term review of the Sendai Framework.

**Target D** aims to “substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030”. The ENGAGE policy work contributes to this priority by outlining recommendations that can assist policymakers on local and regional levels tap into the local knowledge and capabilities of communities, which can serve to foster the development of a more collaborative relationship between citizens and professionals/first responders that can be utilized to better prepare for, respond to, and recover from disasters.

The ENGAGE Knowledge Platform, which hosts the Catalogue of Solutions and the Model for Assessing and Enhancing Societal Resilience, also contributes to this priority. The Model for Assessing and Enhancing Societal Resilience provides a means for first responders and public authorities to identify sources of resilience that can be tapped into and incorporated into future disaster management strategies and planning. The Catalogue of Solutions provides best practice examples of tools, technologies, and guidelines that can be implemented within different contexts to enhance the collaborations between citizens and professionals in all phases of the disaster management cycle in order to achieve goals such as enhancing risk awareness and/or preparedness, empower governance and leadership, improve the efficiency of response, or improve health and mental outlook.

**Target G** aims to “substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030”. The prototype of a chatbot enabled by artificial intelligence that has been developed within ENGAGE contributes to this target by providing a means of conveying information to citizens when a crisis occurs in a manner that allows them to make informed decisions regarding their safety. This technology could, in practice, be integrated within public warning messages delivered by cell broadcast, which would allow citizens to access the chatbot by following a link at the bottom of the message and ask questions such as: “How far away is the hazard from me?” This development effectively makes the formerly “blind” public warning cell broadcast technology a means of facilitating multi-directional communication and enriches its ability to learn from human reactions.



# ENGAGE CONTRIBUTIONS TO THE SENDAI FRAMEWORK



Figure 1: ENGAGE Contributions to the Sendai Framework

## 2.2 ENGAGE CONTRIBUTIONS TO THE UN SUSTAINABLE DEVELOPMENT GOALS

The Member States of the United Nations adopted the 2030 Agenda for Sustainable Development in 2015, which includes 17 Sustainable Development Goals. The work of ENGAGE namely contributes to SDG 1 and SDG 11.

**SDG 1** aims to “End poverty in all its forms, everywhere”, and includes concrete measurements such as **target 1.5**, which aims to “Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters by 2030” (United Nations Office of Economic and Social Affairs, n.d). ENGAGE aims to contribute to this SDG and its target through the development of the AI-enabled chatbot prototype, which will enhance the availability of trustworthy information in the event of a nature-derived or man-made disaster to render citizens more prepared and capable of acting in ways that will best ensure their safety. The chatbot prototype could also be enhanced in the future in order to further reduce vulnerability, for example, by incorporating pre-configured emergency numbers to enable faster access to emergency services or integrating comprehensive translation ability and audio functionalities.

**SDG 11** aims to “make cities and human settlements inclusive, safe, resilient, and sustainable”, with concrete measurements such as **target 11.b**, which aims to “substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation, and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels” (United Nations Office of Economic and Social Affairs, n.d). ENGAGE aims to contribute to this SDG and its target through the development of the Knowledge Platform, which contains strategies, guidelines, and tools that can improve the efficiency of resource allocation and enhance the ability of communities to prepare for, adapt to, and recover from disasters.

## ENGAGE CONTRIBUTIONS TO THE UN SDGs

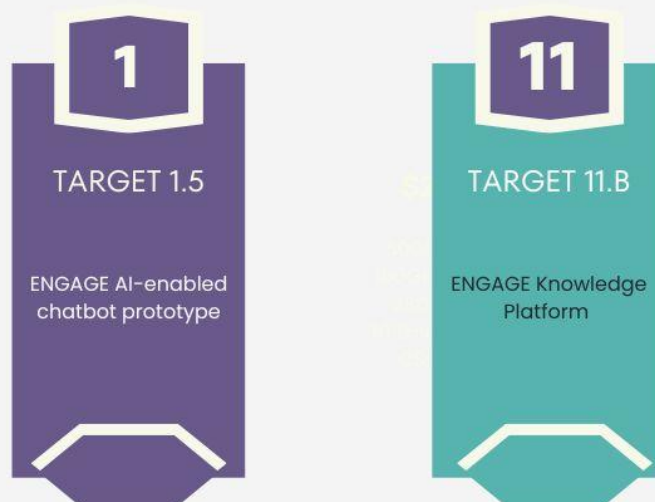


Figure 2: ENGAGE Contributions to the UN SDGs

### 2.3 THE EUROPEAN UNION’S DISASTER RESILIENCE GOALS

In 2023, the European Commission introduced the Disaster Resilience goals, which were spurred by the need to collaborate on an EU level to ensure better preparedness and enhance the ability to withstand the impacts of man-made and nature-derived disasters. The work of ENGAGE contributes to goals 1, 2, and 3.

**Goal 1** is to improve risk assessment, anticipation, and disaster risk management planning. ENGAGE aims to contribute to this goal through the development of the Societal Resilience Model, which can enhance disaster risk management planning by providing a means of better understanding how

citizens react and respond in particular contexts in order to consider what societal resources they may have at their disposal for future crises. The ENGAGE recommendations on involving spontaneous volunteers in disaster management and communicating with citizens in a crisis seek to enhance disaster risk management planning in regard to enhancing the inclusivity of communication strategies and advocating for the adoption of methods that can more effectively enable collaborations with spontaneous volunteers.

**Goal 2** is to increase risk awareness and preparedness of the population. ENGAGE aims to contribute through this goal through the development of the Knowledge Platform, which lists tools, technologies, and guidelines on the Catalogue of Solutions which public authorities and first responders can use to enhance the preparedness of the population.

**Goal 3** is to enhance early warning. ENGAGE aims to contribute to this goal through the AI-enabled chatbot prototype, which can assist in widening the reach of information when a disaster occurs, answer questions regarding the situation, and utilize functionalities such as multimedia and translation to reach segments of the population who may be particularly vulnerable.

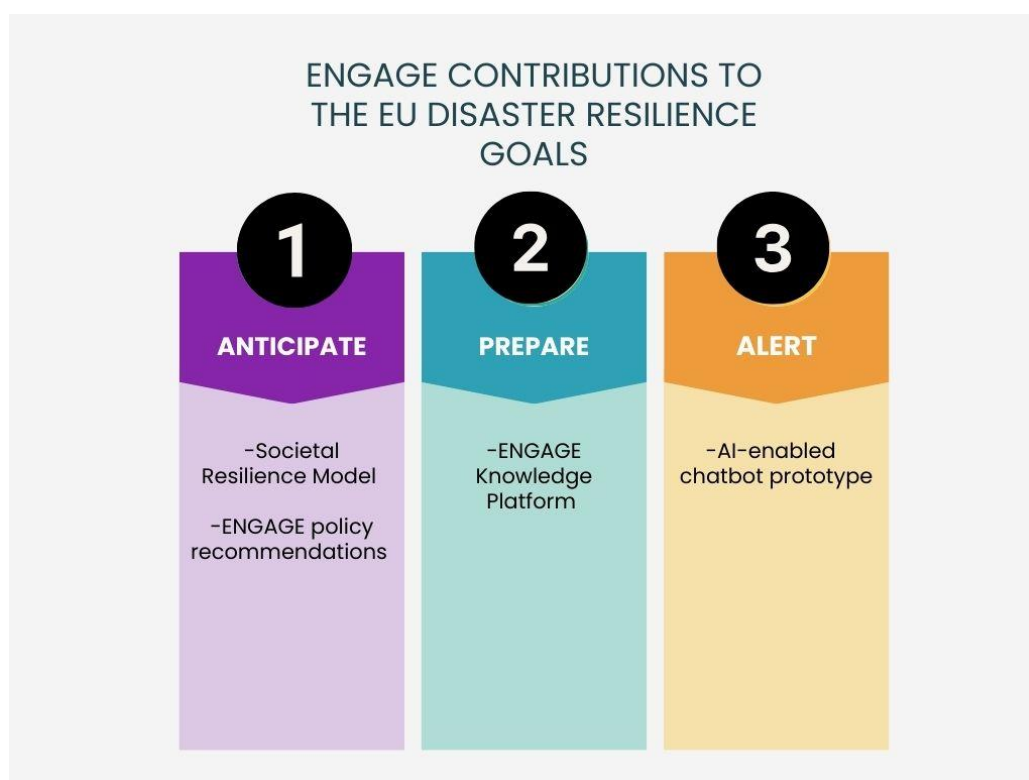


Figure 3: ENGAGE contributions to the EU Disaster Resilience Goals



## 3 ENGAGE POLICY WORK

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### 3.1 METHODOLOGY

The following section outlines the methodology that was employed when developing the policy recommendations. A visual representation of this process is illustrated in figure 3, although it should be noted that each step was not necessarily linear and, at some points, overlapped with each other. This was necessary to ensure that the recommendations were aligned as much as possible with perspective and results of the project as it evolved.

#### 3.1.1 ENGAGE POLICY RECOMMENDATIONS

The policy work of ENGAGE is the culmination of three years of research that has been carried out by the project. As such, the recommendations featured in the two policy briefs on communicating with citizens in a crisis and involving spontaneous volunteers in disaster management are directly related to and heavily influenced by, the deliverables outlined in section 1.4 of this document. A review of other documents was also carried out while developing the recommendations themselves, which included research from other projects in the DRS01 cluster (for example, BuildERS Approach on How to Increase Resilience in Disaster Management), policy briefs published by the European Union (Matti et. al., 2022), workshop reports published by the Disaster Risk Management Knowledge Centre (Corbane et. al., 2021), scientific publications (Hansson et. al., 2020), as well as the Sendai Framework for Disaster Risk Reduction and the Sustainable Development Goals.

The finalized version of the policy briefs was the result of an iterative process of consultations with members of the consortium, who were invited to provide feedback by participating in discussions in designated conference calls and offer comments on a shared document which outlined the recommendations. The aim of this process was to ensure that the content of the policy briefs was as representative of the work and results of ENGAGE as possible. Other activities that were carried out to enhance the visibility of, and illicit feedback on, the policy recommendations will be outlined in chapter 4.





Figure 4: An outline of the methodology employed when developing the policy recommendations.

### 3.1.2 ENGAGE WHITE PAPER

The ENGAGE white paper, entitled “Pathways to Resilience: Results and Insights from the ENGAGE Project” (ENGAGE, 2023) was a collaborative effort amongst all the partners. The document followed a format of chapters that loosely resembled the work package structure of the project, which allowed for work package leaders to create content that they felt encompassed the research that they had carried out. The final product allowed for the project to outline its insights, accomplishments, and contributions to enhancing societal resilience over the course of three years in a common document intended to reach policymakers at national and local levels, the academic community, first responders, citizens, non-profit organizations, and public authorities.

## 3.2 OVERVIEW OF CONTENT

### 3.2.1 ENGAGE POLICY RECOMMENDATIONS

ENGAGE developed two policy briefs over the course of the project’s lifetime: Communicating with Citizens in Crisis and the Involvement of Spontaneous Volunteers in Disaster Management. Both policy briefs are tailored towards regional and municipal authorities- a decision that was taken due

to the fact that these authorities are closer to the communities themselves. In other words, they not only “have an awareness of the current political environment and have the ability to bring about change where its beneficial, but they also understand the operational aspects of dealing with an emergency e.g what resources they have available and who they could call upon within the community if necessary (Wales & Olson, 2023). By targeting stakeholders at this level, ENGAGE also aimed to bridge the gap between research and practice, since the recommendations could easily be integrated within their day-to-day tasks, for example, refining strategies to more effectively assess the needs of the communities they serve while collaborating with local businesses, organizations, and community leaders.

### *3.2.1.1 Communicating with citizens in a crisis*

This policy brief begins with an overview of the current state of emergency communications, and outlines directions that the recommendations seek to build upon. An overarching recommendation featured on the first page of the brief states: “The future of emergency communications requires a new ecosystem that enhances capacity and capability by creating an environment that is accessible, equitable, and anticipates change as a constant state”, which serves to both recognize the work that the sector in its current state has done to convey risk-related information to the public and identify gaps which, if addressed, could enhance trust between citizens and authorities, improve the decision-making capabilities of citizens, and, overall, promote a culture of learning that allows for messaging and the strategies of conveying messages to be continuously refined based on the changing needs of citizens and lessons-learned from previous events.

This policy brief contains five additional recommendations which seek to address various facets of crisis communications from an “all-of-society” approach. An overview of each recommendation is provided below.

1. Bridge the communication gaps between professionals and citizens. For example, in relation to language (terminology), content, risk tolerance, stereotypes, desired outcomes/priorities, and assumptions.

This recommendation advocates for policymakers to better understand citizens and communities on their own terms and take strides towards designing crisis communications infrastructures to more efficiently take their needs into account. This, for example, includes moving away from top-down communication strategies and authorities avoiding the projection of their own perspectives and potential biases in regard to citizen needs on the risk-related messages that they convey.

2. Recognize that communication is a continuous activity that is reliant on creating the right conditions for it to be effective.

This recommendation advocates for a longevity approach to be taken to conveying risk-related information rather than focusing disproportionate levels of resources into specific phases of the disaster cycle. Rather, crisis communication strategies should be refined to allow for continuous interactions with citizens- for example, conveying information that provides opportunities for routine engagement to enhance mutual understanding as well as conveying urgent risk information. However, fostering the development of successful strategies must involve recognizing that communication always occurs within a specific context. One particular example of this is that of trust between citizens and authorities, which should be “recognized for their importance and receive appropriate investment as part of any communications strategy” (Wales, 2023) in order to better understand “its influence on the willingness to accept and act upon information” (Wales, 2023).



3. Design consistent messaging and communication that is inclusive and adaptable to specific needs.

This recommendation advocates for authorities and agencies that convey risk-related information ensure that their messaging is consistent with the “collective intent and information” (Wales, 2023). This is important in order to reduce the spread of incorrect or misinformation and ensure that trust in the message itself is not eroded. The recommendation highlights the importance of taking citizen needs into account, in order to understand “how they influence communication design and delivery in order to retain consistency, whilst ensuring the ability to tailor communication to specific needs or contexts” (Wales, 2023).

4. Recognize communication as a learning opportunity and actively design in opportunities to exploit this throughout the [disaster management] cycle.

This recommendation advocates for an iterative process to be taken to developing crisis communication strategies. This involves “taking a broader view of how communications can inform general learning” (Wales, 2023) in order to ensure that “learning from every event (regardless of size) in some way informs [the strategies that will be put in place to prepare for and respond to] future events” (Wales, 2023).

5. Communication strategies should recognize and positively support the opportunities that emergencies provide for citizens, communities, and formal agencies to enhance integration and resilience.

This recommendation advocates for more effectively recognizing the contributions of citizens in regard to preparing for, responding to, and recovering from nature-derived and man-made disasters. This involves actively working to dismantle pre-conceived biases within the current crisis communications sector which downplays or outright ignores these positive achievements. This can be achieved by “addressing current imbalances and perceptions through communication” (Wales, 2023) and “proactively seeking opportunities for citizens and communities to carry out tasks that will develop their inherent resilience in anticipation of future events” (Wales, 2023).

Conclusions derived from these policy recommendations and implications for future work will be outlined in **chapter 6**.

### *3.2.1.2 Involvement of spontaneous volunteers in disaster management*

This policy brief opens with an overview of the current environment in which spontaneous volunteers operate in- including an outline of the commonly held perspectives that downplay or overlook their contributions and are only considered in terms of their usefulness to professionals. The introduction seeks to shine a light on the myriad ways in which spontaneous volunteers respond to and assist their communities in recovering from, disasters, while at the same time acknowledging the challenges that first responders and other professionals working in the field of disaster management face in regard to collaborating with them. This is the basis upon which the overarching recommendation in this policy brief builds, and which serves to move away from the paradigm of volunteers needing to be absorbed into already existing professional disaster management infrastructures while proposing ways to further recognize their contributions and enhance their capabilities to contribute in future disasters.



In this regard, this policy brief outlines five recommendations that can be adopted on regional and municipal levels in order to strengthen collaborations between citizens and first responders and improve joint response to and recovery from disasters.

- Adopt a strategy that enables and optimizes the contribution of volunteers.

As previously mentioned, this recommendation frames the subsequent four, and highlights the fact that strategies that seek to make volunteers conform to “expectations, structures, and practices of civic bodies and professionals” (Wales, 2023) can serve to inhibit their integration, rather than facilitate it. Rather, volunteers should not only be accepted as they are, but their various needs and perspectives in their ways of working should be taken into account, since neither professionals nor volunteers compose homogenous groups. In this regard, strategies that “provide a common purpose but allow flexibility in how they are organized” since a specific and standard solution does not exist.

- Review the appropriateness of the term “volunteer” as a primary descriptor.

This recommendation builds upon the previous one- and seeks to recognize the diversity within volunteers as a group, both in terms of the skills and expertise that they hold as well as the ways that they view their contributions in the response and recovery phases of disaster management. This is why ENGAGE advocates for creativity to be utilized in terms of describing their contributions.

- Formally recognize and manage Values, Ethics, and Trust (VET)

Since spontaneous volunteers often work within an environment where the standard operating procedures which govern the actions of professionals do not exist, they are more susceptible to facing particular issues in regard to the aforementioned aspects. For example, personal assessments of individuals are more likely to be relied upon when reacting rather than rules or regulations, which means that the individual themselves will have to live with the consequences if they feel that a particular VET issue has been violated. These are factors that should be considered on the professional side of disaster management- both in terms of assessment and management to be prepared for potential issues to occur.

- Use technology to strategically enhance the volunteer experience and contributions.

This recommendation seeks to recognize the fact that not all contributions of volunteers occur on the ground. Some contributions occur despite not being within a physical proximity of the disaster- for example, the coordination and allocation of resources can happen remotely, and individuals can provide donations with the click of a button, to name a few examples. In 2022, the Dopomoha application was launched in response to the refugee crisis spurred by the war in Ukraine. The app provides individuals with an opportunity to help, for example, by offering accommodation, providing food, products, clothing, or even transportation. Technologies such as these “create an environment in which everyone can contribute” (Wales, 2023) and ways that they could be integrated within disaster management strategies and processes should be considered by professionals.

- Strengthen learning structures to advance the contributions of volunteers.

This recommendation advocates for strides to be taken towards creating a culture of learning from past disasters in order to better prepare for future ones. This is particularly relevant for spontaneous volunteers, as their contributions seem “poorly represented within, or absent from, data collection



or post-event processes” (Wales, 2023). This is why “individual and collective experience must be captured to build a cohesive and full understanding of each incident. Doing so will enhance every aspect of subsequent crisis and disaster activity” (Wales, 2023).

Conclusions derived from these policy recommendations and implications for future work will be outlined in **chapter 6**.



## 4 OVERVIEW OF ACTIVITIES

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One of the main motivators behind the development of the ENGAGE policy recommendations was to start a conversation among stakeholder groups, as this is a first step that can be taken when working towards a transition from the current system to a new model which takes an “all of society” approach to crisis communications and working with spontaneous volunteers. In this regard, the following activities were seen as methods of fostering the commencement of that conversation, as they would serve to enhance the visibility of the recommendations and the gaps that they fill in the current system as well as help in gaining an understanding of what steps might be taken in regard to the implementation of the recommendations.

### 4.1 PRESENTATIONS

Several presentations were carried out at international conferences in order to highlight the policy work of ENGAGE and the ways in which the policy recommendations contributed to public safety as well as current research on communication, citizen involvement, and societal resilience. A secondary aim was to network with policy makers, practitioners, first responders, public authorities and representatives of the research community in order to elicit feedback.

- NEEDS Conference 2022- Copenhagen, Denmark
  - This presentation illustrated the gaps in the current crisis communications model by providing examples of communication-related vulnerabilities that emerged as a result of the COVID-19 pandemic.
- CERIS- Disaster Resilient Societies Cluster Conference 2022- Brussels, Belgium
  - ENGAGE took part in a policy roundtable with several other projects from the DRS01 cluster, which aimed at discussing common policy themes and how their relevance to policy makers on an EU level could be ensured.
- EENA Annual Conference 2023- Ljubljana, Slovenia
  - The recommendations were presented to an audience of first responders, public authorities, industry representatives, and members of the research community in order to illustrate what a “citizen-first” approach to crisis communications could look like.
- European Geosciences Union (EGU) 2023- Vienna, Austria
  - Limitations of the current crisis communications system and how the ENGAGE recommendations could address them were presented.
- CERIS- Disaster Resilient Societies Cluster Conference 2023- Toulouse, France
  - A brief presentation of the ENGAGE policy work was carried out alongside other projects in the DRS01 cluster with the aim of networking with policy makers on municipal and local levels.
- CORE Stakeholder Forum- Brussels, Belgium
  - The ENGAGE policy perspective was presented in a panel in order to provide a basis of lessons learned for future projects that focus on societal resilience.

### 4.2 SOCIAL MEDIA CAMPAIGNS

Campaigns were carried out on ENGAGE social media channels (LinkedIn, X/formerly Twitter, and Facebook) in order to enhance the visibility of the ENGAGE recommendations and garner feedback from external stakeholders.



Graphics were created for each of the recommendations that aligned with the project's corporate branding guidelines, and text delving deeper into the context which informed the individual recommendations was provided in each social media post. A link was also provided in the social media posts to direct the audience to the "[Outcomes](#)" section of the ENGAGE website, where the policy briefs are published, to allow them to download the briefs themselves and read more.

**"THE FUTURE OF EMERGENCY COMMUNICATION REQUIRES A NEW ECOSYSTEM THAT ENHANCES CAPACITY AND CAPABILITY BY CREATING AN ENVIRONMENT THAT IS..."**



Figure 5: Example of a graphic created to carry out the policy recommendations social media campaign.



The case study analysis of ENGAGE has illustrated the myriad contributions of citizens/spontaneous volunteers in all phases of the **#disastermanagement** cycle.

However, on the professional disaster management side, we find that strategies to enhance collaborations with spontaneous volunteers tends to focus on ways of making volunteers conform to the expectations, structures, and practices of civic bodies and professionals.

ENGAGE sees this as a narrow lens, which perceives volunteers only in terms of their utility to professionals and fails to recognize the true nature, scope, and scale of volunteering- most of which occurs independently and out of sight of professionals. This is why we recommend that strategies be adopted that enable and optimise the contributions of volunteers.

You can read more about our policy recommendations on our website:  
<https://lnkd.in/epRSvBNz>



Adopt a strategy that  
enables and optimises the  
contributions of volunteers.



*Figure 6: Example of additional text provided in regard to a spontaneous volunteers policy recommendation on social media.*

### 4.3 POLICY ROUNDTABLES

ENGAGE carried out two policy roundtables as a part of the agenda of two of the validation exercises. The outcomes of each roundtable are outlined in the subsequent sections. The aim of the roundtables was to facilitate feedback from the consortium and Ki-CoP members on the finalized version of the recommendations, which was helpful in order to draw conclusions on our work and identify future directions in which the recommendations can be taken. These conclusions are featured in **chapter 6**.

#### 4.3.1 ROUNDTABLE 1: TÂRGU MUREȘ, ROMANIA

10 individuals participated in this roundtable- 6 representatives of civil society organizations/NGOs, and 4 “others” (e.g individuals from the research community). Three recommendations were chosen to be discussed in this roundtable- one from the communication policy brief and two from the policy brief on spontaneous volunteers.

Participants of the roundtable were provided with an introduction to the policy work and how it relates to the overall work of ENGAGE- which included an overview of what type of research the recommendations themselves were based on. Participants were then asked to contribute to a mentimeter quiz, where they were asked to provide their initial thoughts on each recommendation, what obstacles they think the recommendation might face in the implementation stage, and how they would suggest that the recommendation could move forward. The opportunity for making any other comments was also provided- for example, perspectives regarding the feasibility of each recommendation.

##### 4.3.1.1 Summary of feedback

Overall, the feedback received from the participants was positive and the recommendations that were presented were deemed to be relevant based on their background experience and perspectives. They highlighted the importance of co-creative processes with different stakeholder groups when seeking to implement the recommendation and taking into account the perspectives of the groups that the recommendations target (e.g citizens or spontaneous volunteers).

An overview of comments that were received on each recommendation is outlined below:

- 1) Communication strategies should recognize and positively support the opportunities that emergencies provide for citizens, communities, and formal agencies to enhance integration and resilience.

Initial thoughts related to the recommendation:

- “This is good as a strategy, but it is important how you implement/disseminate the messages (e.g the channels, lengths)”
- “Communication is very important for all participating structures, NGOs, state structures, etc. We want to continue this.”
- “Initial thoughts related to this recommendation are positive. Good, proper, and transparent communication enhances trust among the authorities and emergency responders and citizens and this in the future can help to involve and integrate all agents and build resilience.”

Obstacles related to implementation:



Join at [menti.com](https://menti.com) use code 7935 3894

Mentimeter

What obstacles do you think such a policy implication would face in the implementation stage?

20 responses



Figure 7: Obstacles related to implementation that were put forth by participants.

The obstacles focused mostly on resources available in terms of time and effort as well as funding. Other obstacles that were mentioned included the transparency of the recommendations, consistency, and technical problems.

2) Use technology to strategically enhance volunteer experience and contributions.

Initial thoughts related to the recommendation:

- “Keep IT simple.”
- “Tech needs to be for the volunteers, giving them the extra motivation/knowledge.”
- “Technology must be easy to use, and easy to understand.”

Obstacles related to implementation:



Join at [menti.com](https://menti.com) use code 7935 3894

Mentimeter

What obstacles do you think such a policy implication would face in the implementation stage?

13 responses



Figure 8: Obstacles related to the implementation of recommendation 2.

The obstacles related to the implementation of the second recommendation focused quite heavily of ensuring access, ensuring knowledge of the technology available, and the availability of resources.

3) Strengthen learning structures to advance the contributions of volunteers.

Initial thoughts regarding the recommendation:

- “Needs coordinating. From the government side, this could involve inviting NGOs and others to regular meetings or gathering data from them based on particular themes.”
- “Evaluate complexity.”

Participants were then asked how they would advise to carry this recommendation forward:



Join at [menti.com](https://menti.com) use code 7935 3894

Mentimeter

How would you suggest to take this recommendation forward (in regard to implementation)  
10 responses



Figure 9: Participants suggested how they thought this recommendation could be carried forward.

The participants highlighted the importance of co-creation processes when carrying the recommendation forward, including capturing the motivations of volunteers who respond to and help their communities recover from, nature-derived and man-made disasters and their perspectives.

#### 4.3.2 ROUNDTABLE 2: TRONDHEIM, NORWAY

This roundtable featured different recommendations in order to facilitate new feedback and avoid repetition for individuals who had already participated in the roundtable in Romania. There were 24 participants:

- 1 policymaker at a regional/local level,
- 6 first responders,
- 5 representatives of civil society organizations/NGOs,
- 3 public authorities, and
- 9 individuals who corresponded to the category of "other" (e.g individuals from the research community).

The roundtable focussed on the following recommendation:

- 1) Design consistent messaging and communication that is inclusive and adaptable to different needs.

##### 4.3.2.1 Summary of feedback

Overall, the feedback received during this policy roundtable was also positive, but participants were asked to be especially critical based on their experience. An overview of comments received on the recommendation are outlined below.

Initial thoughts related to the recommendation:

- “Good that it is inclusive and adaptable for different needs. It makes it accessible for a bigger group.”
- “I would also add accessible beside inclusive.”
- “Communication should address barriers that prevent behavioural change.”
- “Co-create with stakeholders.”

Participants were then asked about potential obstacles that they envisioned in regard to implementation:

Join at [menti.com](https://www.menti.com) use code 8187 1613

 Mentimeter

What obstacles do you think such a policy implication would face in the implementation stage?

33 responses



Figure 10: Participants suggested potential barriers to implementation.

Participants highlighted the importance of the availability of resources when implementing this recommendation, and noted that aspects like language barriers, a lack of knowledge, and mistrust may prove to hinder the process.

#### 4.4 SYNERGIES WITH THE DRS01 CLUSTER

In order to ensure the alignment of the ENGAGE policy recommendations with the other projects in the DRS01 cluster, ENGAGE participated in policy working group meetings with LINKS, PARATUS, BuildERS, CORE, and RiskPacc in order to outline joint policy priorities and develop common outcomes. These collaborations not only resulted in enhancing the visibility of the cluster and ensuring that future societal resilience projects have a policy framework upon which they can build, but also resulted in enriched policy because of the varying but complementary perspectives of each project (e.g BuildERS focused on intersectional vulnerability in disasters while LINKS focuses on social media and crowdsourcing). One main outcome of these meetings is a joint policy brief to which ENGAGE has contributed, which was developed using the Horizon Results Booster Service and focuses on the topics of communication and engaging the population. The policy brief is expected to be published before the end of 2023.



## 4.5 PRESS ARTICLES

For the purpose of reaching as wide of an audience as possible, ENGAGE also published a news article on the blog of the Crisis Response Journal (Wales, 2023). The Crisis Response Journal is a well-established publication that serves to “cover all aspects of human-induced disasters or natural hazards, spanning response, disaster risk reduction, resilience, business continuity, and security” (Crisis Response Journal, n.d). This particular publication was chosen due to its interdisciplinary readership, which is comprised of representatives of local and national governments, front-line emergency response and civil protection organizations, international institutions, NGOs, experts in emergency response and the security of critical infrastructures, as well as other actors in the fields of prevention, response, resilience, and continuity.

The article provided an overview of the policy briefs, outlined the recommendations, and pointed readers in the direction of the ENGAGE website in order to learn more.



## 5 CONTRIBUTIONS TO STANDARDIZATION

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The recommendations that have been developed as a result of ENGAGE research have the potential to contribute to two identified standards: ISO 22329: Security and Resilience- Emergency Management- Guidelines for the use of social media in emergencies and ISO 22319:2017: Security and resilience- Community resilience- Guidelines for planning the involvement of spontaneous volunteers.

Although there are no current revisions planned for the standards that are listed until an international ballot is initiated, ENGAGE has already completed the first step is analyzing the two standards, identifying ways in which the standards and the policy briefs align, and outlining ways in which the scope and focus of the standards could be refined.

### 5.1 ISO 22329: SECURITY AND RESILIENCE- EMERGENCY MANAGEMENT- GUIDELINES FOR THE USE OF SOCIAL MEDIA IN EMERGENCIES

#### 5.1.1 OVERVIEW

ISO 22329 is focused specifically on the use of social media in emergencies. However, it recognizes and references that this will need to align with an organization's wider communications strategy and plans. Its target audience is organisations that will need, or want, to communicate with citizens during a crisis. This will of course include, but not be restricted to, formal actors. In line with its scope and intended audience, it offers a prescriptive step by step guide to the use of social media.

The ENGAGE policy brief on communicating with citizens does not specifically address or reference the role of social media. However, the issues that it discusses and the recommendations that it outlines are relevant to informing the way in which organizations would use social media when communicating with citizens. It is also reasonable to expect that social media would have a key role to play in achieving the policy recommendations, especially since its intended audience are those with a responsibility for creating policies for formal actors within the civic environment.

Bearing this in mind, the recommendations are likely to be relevant to the broader audience of the ISO document, since its tone is one that encourages organizations to adapt to citizens needs and behaviours rather than seeking to dictate them.

Recognizing their different purpose and audiences, the comments below are not intended as critical of either document. Instead, the aim is to see where there are areas of sufficient mutual interest (agreement or points of difference) for a conversation to improve harmonisation between policy and practice.

#### 5.1.2 KEY FINDINGS

An area in which the documents differ significantly is in relation to their view of the relationship between organizations and citizens. In that respect, the ISO document can be considered to be representative of the dominant and prevailing view. In this regard, the citizen is primarily a recipient





of risk (or associated) information communicated to them by professionals, which is exhibited by the “citizens’ guidance” outlined in Annex D of the ISO standard. Furthermore, the direction of communication is expected to be predominantly one way or based on the organization’s needs, and the system is predicated around this concept. Alongside this, citizens are expected to educate themselves about formal agencies so that in the event of an emergency, they will be “informed on how the organization uses, or does not use, social media to support emergency management” (ISO, 2021 p. 14) and will know “how they can most effectively interact with the organization on social media” (ISO, 2021 p. 9).

In its desire to be thorough, this does mean that some of the expectations of citizens described in the document seem onerous. However, the underlying message seems to indicate that the responsibility is on citizens to adapt to the formal actors’ ways of working. Citizens seem to be expected, for example, to provide information to organizations in formats that best suit them. In this regard, citizens are advised not to “send unconfirmed information and to post only facts” (ISO, 2021 p. 15) and organizations are advised to filter information based on aspects such as “understandability, readability, language used, and average length of words” (ISO, 2021 p. 11) as well as “the number of followers that a source has” and whether they were “active before the actual event” (ISO, 2021 p. 11). In its aim of identifying how to enhance stakeholder integration, ENGAGE challenges this narrative. It recognizes that citizens have different needs, which may be disregarded or downplayed through protocols such as these. ENGAGE also recognizes that formal actors cannot control communications in the way they have, perhaps, been able to do historically. This is another key difference between the documents, as the ENGAGE recommendations assume that formal actors need to adapt to the world as it is, and not how they would prefer it to be. As such, it argues that communication requires a new and equitable ecosystem, one that is based on the principles of accessibility, inclusivity, and the anticipation of change as a constant state. Most importantly, the ENGAGE recommendations advocate for communication to be multi-directional, and able to accommodate different (e.g unstructured) types of communications.

### 5.1.3 ASSESSMENT OF ENGAGE CONTRIBUTIONS TO ISO 22329

- Bridge the communication gaps between professionals and citizens. For example, in relation to language and (terminology), content, risk tolerance, stereotypes, desired outcomes/priorities, and assumptions.

This is not a theme that is featured strongly in the ISO document, and, to some extent, it may be outside of its scope. However, social media offers formal actors a continuous stream of learning and engagement and is well-suited to support the ENGAGE recommendation.

- Recognize that communication is a continuous activity that is reliant on creating the right conditions for it to be effective.

This is something that is partially acknowledged within the ISO. The use of social media before, during, and after an emergency is specifically referenced and some advice given about how it would differ during these phases. Both documents also identify trust as having a key influence on effective communication. The difference is in how each understands trust. The ISO document suggests that it can be created through simple acts, such as quick replies. Rather, ENGAGE identifies it as being more complex, contextual, and dynamic.



- Design consistent messaging and communication that is inclusive and adaptable to specific needs.

This is an area that was identified as being highly important by ENGAGE but is not featured specifically within the standard. The ISO document references the need to align with the culture of the social media channel but does not explicitly raise the need for communications to be generally inclusive or adaptable. This may reflect its scope in terms of being concerned with social media as a specific channel rather than the general development of risk communication and associated messaging. However, if this aspect of the ISO document were to be continued through the recommendations of ENGAGE, it should be noted that although the culture of each social media channel may be the dominant one, it still may not adequately address the diversity of citizen needs. In this regard, it is important that the writing style that is deemed appropriate for each specific social media channel also takes needs assessments into account to ensure the widest possible reach of communicated messages.

- Recognize communication as a learning opportunity and actively design in opportunities to exploit this throughout the cycle.

Both documents recognize the role of monitoring and evaluation to improve organizational communication. However, they differ in relation to the ENGAGE recommendation, which looks beyond this aspect to advocate for communication to be employed as a part of a broader learning strategy for all stakeholders.

- Communication strategies should recognize and positively support the opportunities that emergencies provide for citizens, communities, and formal agencies to enhance integration and resilience.

Social media provides a valuable resource for achieving this recommendation. However, in line with its remit, the ISO document does not specifically address this issue, and the two documents differ in their perspective on the relationship between citizens and formal actors or organizations. This means that they offer different perspectives on what is required to enhance integration and resilience.

## 5.2 ISO 22319:2017: SECURITY AND RESILIENCE- COMMUNITY RESILIENCE- GUIDELINES FOR PLANNING THE INVOLVEMENT OF SPONTANEOUS VOLUNTEERS

### 5.2.1 OVERVIEW

The ISO document and ENGAGE policy brief share a common theme but were created for different purposes. Although this has a significant impact on their respective scope, focus, and tone, it provides a useful mechanism to consider some of the key issues in relation to Spontaneous Volunteers (SVs).

The ISO is a technically oriented document with the aim of providing specific guidance to formal actors on how to manage the involvement of spontaneous volunteers. It takes a functional approach and could be likened to an operations manual identifying the steps and considerations required to set up a system to manage SVs. As such, it primarily sees SVs a resource for formal actors and the extent of their involvement is therefore determined by their perceived utility to formal agencies.



Beyond minor references, it is not concerned with SVs that operate independently out of the control of formal actors.

The ENGAGE Policy Brief approaches the subject from a more citizen-centric perspective. It is seeking to influence policy makers and so it differs from the ISO in that it uses recommendations (rather than identifying specific actions) to influence thinking at an earlier stage of the disaster management process. Through its recommendations it has the aim of identifying ways in which an all-of-society approach could be achieved and is in that respect more outcome focused. It recognizes the citizen as a legitimate stakeholder whose motivations, experience, and contribution are important considerations. The ENGAGE policy brief considers SVs as independent entities, and not just as a function of their interaction with formal actors.

Recognising their different purpose and audiences, the comments below are not intended as critical of either document. Instead, the aim is to see where there are areas of sufficient mutual interest (agreement or points of difference) for a conversation to improve harmonisation between policy and practice.

### 5.2.2 KEY FINDINGS

The attitude towards SVs is perhaps one of the most interesting areas of difference as it frames every aspect of each document. It may also form an attitude in the reader that could influence their subsequent view of, or interaction with, SVs. In turn, this will affect the experience of an SV and their willingness to engage with formal actors. As such, the attitudes conveyed (whether intentionally or not) can form a self-sustaining cycle for all parties which may work for or against the desire for greater integration of all actors.

As highlighted above, the ISO document sees SVs predominantly from a utilitarian perspective. What can they contribute, what risks does this create and how much effort is required by the formal actors to manage them? The involvement of SVs is primarily seen as by invitation of the formal actors who act as custodians and gatekeepers. It regularly references the need to manage risks associated with the involvement of SVs and can be considered risk averse in that respect.

The ENGAGE Policy Brief considers SVs as having a legitimate right to be involved by default. It also recognizes them as an asset which provides a valuable capability, and one that can be enhanced individually and collectively over time. In that respect, it takes a “community-first” approach, and has less of a focus on risk as a barrier and advocates for greater willingness to accept them as they are in pursuit of developing the capacity and contribution of SVs.

Another aspect that is interesting is the terminology and definitions that are used, which is perhaps not surprising given the different audiences and focus points of the two documents. However, it could be beneficial to explore the respective influences on these.

### 5.2.3 CONTRIBUTIONS TO ISO 22310:2017

- Adopt a strategy that enables and optimizes the contribution of volunteers.

The ISO and ENGAGE documents share this common aim but differ in their scope. The ISO mainly limits its interest to the perspective of formal actors and how they can best make use of spontaneous



volunteers (SVs). The ENGAGE policy brief takes a broader and more SV-centric perspective. This includes where they act independently and outside of any interaction with formal actors.

- Review the appropriateness of the term “volunteer” as a primary descriptor.

The ISO does not question the use of the term ‘volunteer’. However, the ENGAGE policy brief identifies it as a potentially unhelpful term which is also inconsistent with the way other contributors are identified.

- Formally recognize and manage Values, Ethics, and Trust (VET).

The ISO standard does not specifically address these as a subject area in relation to SVs themselves. The closest reference is in relation to ways in which SVs may cause reputational damage to organizations. However, the tone and content of the standard would suggest that the authors have low levels of trust in SVs. ENGAGE discusses the role of trust and how the lack of trust formal actors have in others (including SVs) can be an obstacle to progress and integration.

- Use technology to strategically enhance the volunteer experience and contributions.

This is not specifically addressed in the ISO standard.

- Strengthen learning structures to advance the contribution of volunteers.

The ISO standard is predominantly concerned with managing risks but does include guidance on the need to learn from the inclusion of SVs. However, reflecting their audience, this is primarily to inform the future practice of formal actors (and their cost/benefit analysis of using SVs). The language is of competency, verification, and economic value of the SVs involvement. In comparison, ENGAGE recognizes SVs as an independent entity and advocates for learning to enable a better understanding of their contribution, which involves providing them with learning opportunities in order to support and enhance their contributions.

## 6 CONCLUSIONS

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ENGAGE recognizes that facilitating change on a policy level takes time, especially since the recommendations that had been laid out propose a movement towards a new ecosystem for crisis communications and spontaneous volunteers. Such movements cannot, by nature, be instantaneous, as they involve the dismantling of paradigms (e.g professionals decide what risk information needs to be conveyed to citizens; spontaneous volunteers cannot be trusted) that exist within many disaster management strategies and plans in their current form. Given that such strides must be taken in conjunction with carrying out day-to-day duties and preparing for and responding to the increased frequency and intensity of nature-derived and man-made disasters, the recommendations, in their current state, aim to, first and foremost, start a conversation around these changes with regional and local authorities.

In addition, ENGAGE understands that the effectiveness of the recommendations relies upon their implementation “at a pace and scale that is achievable” (Wales & Olson, 2023), while keeping in mind various aspects that may serve as a barrier to this process. In this regard, feedback from the consortium and Ki-CoP members assisted in outlining what such a pathway could look like during the policy roundtables in Romania and Norway. For example, in Romania, when presented with the following recommendation: “Communication strategies should recognize and positively support the opportunities that emergencies provide for citizens, communities, and formal agencies to enhance integration and resilience”, such feedback included ensuring that sufficient time and resources were available in order to adapt communication strategies, ensuring that the actions carried out as a result of the recommendation align with its ultimate aim, and ensuring that communicating does not only entail conveying information, but also listening to stakeholder groups.

When presented with the following recommendation on the involvement of spontaneous volunteers in disaster management: “Use technology to strategically enhance volunteer experience and contributions”, the feedback included identifying ways that the implementation of such technologies could include but also exclude some groups, that technology itself has to be supplemented with other strategies in order to fully involve spontaneous volunteers and, to ultimately, “keep it simple”, since technology must be easy to use and understand. In Norway, when presented with the recommendation: “Design consistent messaging that is inclusive and adaptable to different needs”, feedback again centred around the sufficient availability of resources, and noted that potential language barriers must be considered as well as ways to facilitate public acceptance. These roundtables illustrated, above all, the importance of interdisciplinary discussions such as these, which allow for insights to be shared based on different backgrounds and experiences. Activities such as these, which facilitate processes of co-creation, must continue to be carried out if the recommendations are to be implemented in a way that adequately meet the needs of all stakeholder groups.

ENGAGE recognizes that, if these recommendations are implemented, they will have significant implications on not only current policies, but future policies as well, and would impact their “purpose, tone, and content” (Wales, 2023). Bearing this in mind, accompanying changes to policy drivers should also be facilitated which could include, for example, drafting research and funding proposals in order to ensure alignment with the recommendations.

Ultimately, however, ENGAGE understands that crisis communications and involving spontaneous volunteers are processes that exist within the wider emergency sector and, therefore, a “significant



change in direction would require some degree of consensus” (Wales, 2023). It is our hope that these recommendations can serve as a first step towards a sector that more effectively meets the needs of, recognizes, and enables the contributions of, citizens. In this regard, although “authorities and professionals will continue to be at the very heart of the new system, they will have to change their historical role to one that is more reminiscent of a system custodian than controller” (Wales, 2023).



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