

Strengthening Societal Resilience to Disasters:

Improving
Engagement and
Communication
among Citizens and
Authorities



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Foreword

Societal resilience to disasters and risk governance are embedded in international policies such as the UN Sendai Framework for Disaster Risk Reduction and the EU Union Civil Protection Mechanism (UCPM), leading to recommendations that guide policy actions at national, regional, and local levels. While EU policies mix coordination mechanisms of voluntary character in the civil protection sector (e.g. UCPM) and of legislation of binding character in other sectors (e.g. Flood Directive), awareness of citizens and local authorities seems often far away from the EU policy framework. When speaking about EU research related to Disaster Risk Management (DRM), the situation is even worse, and there is a big valley between applied research results and their recognition at regional or local levels. However, the needs to bring together key DRM actors, including policy-makers, scientists, practitioners, SME/industry, and civil society representatives have been clearly highlighted since early stages of the Secure Societies Research Programme some ten years ago, and exchanges among different sectors and disciplines took place since then in the framework of a community building that is now known as the Community of European Research and Innovation for Security (CERIS). Identified gaps regarding societal resilience to disasters were identified in this context, leading to research topics in the H2020 and Horizon Europe research programmes, in particular in the

Secure Societies programme (Cluster 3). Exchanges among various projects and within the CERIS platform have gradually improved the participation of societal actors and representatives of local authorities (including municipalities), which had been for too long disconnected from EU research. The success of a CERIS event held in Toulouse in May 2023 on societal resilience and risk governance has demonstrated that dialogues among different actors, including local ones, is not only possible but increasingly demanded. Project synergy-building is developing and is crystallising in the form of clusters, among which the Societal Resilience Cluster (SRC) is certainly one of the more active. This policy brief is a result of these synergy-building efforts among 9 projects gathering more than 100 organisations. It expresses recommendations and actions from a high critical mass of multi-sectoral and pluridisciplinary knowledge in support of civil protection and related policies towards improved engagement and communication among authorities and citizens in DRM, and it will hence attract a wide readership from international to local levels.

Philippe Quevauviller

*Research Programming and Policy Officer
European Commission, DG HOME*



Executive Summary



This document aims to provide decision-makers and stakeholders with relevant, evidence-informed policy recommendations on how to increase the level of resilience to disasters in European communities. Specifically the document focuses on **improving engagement and strengthening communication among citizens and authorities** in Disaster Risk Management (DRM).

The recommendations are grounded in an **all-of-society** approach, aimed at strengthening societal inclusion in Disaster Risk Reduction (DRR). This entails broad-based participation in disaster risk management through engagement with different stakeholders including formal authorities and response organizations, businesses and private actors, and volunteers and citizens, including those which are marginalized and most vulnerable. Hence, the recommendations contribute directly to the achievement of the goals and outcomes within the Sendai Framework for Disaster Risk Reduction around **building resilient communities** as well as the European Union's Disaster Resilience Goals and Climate Adaptation Strategy towards **increasing preparedness and enhancing a culture of risk prevention amongst the population**.

The document is based on the **outcomes from 9 Research and Innovation projects as part of the Societal Resilience Cluster**, an initiative supported by the Crisis Management Innovation Network Europe. The recommendations in this document are the result of co-production processes involving experts, scientists, practitioners, and decision-makers from over **100 organizations**. All of the projects involved have received funding from the EU Horizon 2020 and Horizon Europe programmes for Disaster Resilient Societies (DRS).



Key Takeaways

Societal resilience and preparedness to disasters are shaped by the way authorities and citizens exchange, access, understand, and react to information about hazards. As a result, anyone may become more vulnerable if barriers to these processes occur.

Disaster Management Organizations, including civil protection authorities, emergency management professionals, and first responders:



Build competencies and knowledge in the population through dedicated events and education programmes.



Identify and integrate supporting initiatives (e.g. resource mobilization and volunteers, local expertise) from the population in preparatory phases, which can be utilized during response and recovery time.



Develop strategies for strengthening community support networks, including private citizens, aid workers, 'intermediaries', and other stakeholders for identifying diverse needs and building local DRM capacities.



Work together with local leaders (e.g. community organizers, religious leaders, business owners) to identify which communication means and content is most accessible, understandable, and useful for individuals (including the most vulnerable) with diverse needs.



Develop two-way communication channels (e.g. emergency helplines, social media platforms, mobile apps, community meetings and forums) and encourage multiple-way dialogue between the public and authorities for more effective and inclusive disaster communication.

Strengthening societal resilience to disasters, therefore, requires investment by authorities at operational, strategic, and policy levels to improve engagement with citizens and to integrate inclusive communication processes.

Policymakers at local, national, and international levels:



Allocate resources for participatory and co-creation processes at local level to facilitate civic engagement.



Review and revise disaster and crisis management doctrines to better leverage engagement and contributions from the population.



Promote and allocate resources to disaster management organisations for investments in inclusive disaster communication practices, digital applications, and expertise (e.g. trained digital mediators who are specifically trained to help people with different accessibility needs).



Implement policies and regulations which ensure the accessibility to disaster communication and information for all parts of the society.

Scene Setter

The outcomes from the Societal Resilience Cluster projects are built on decades of research and experience. They demonstrate the positive impacts of an *all-of-society* approach for involving members of the population in disaster risk management. Good examples of these initiatives include earthquake and tsunami preparedness and evacuation programmes implemented together by authorities and schools in Japan, and the preparatory actions of local women in the Italian city of L'Aquila before it was struck by a devastating earthquake in 2009, where bags had already been prepared containing necessary items for their families in case of a quick evacuation from their homes. More recently, the mobilisation of community resources for emergency food and shelter during the response phases of wide area floods in Germany in 2023 demonstrated where shared objectives and inclusive communication among the population and authorities can contribute to strengthening disaster management efforts.

Despite these concrete examples, there remains ongoing gaps in the levels of preparedness and response of populations. This has been observed during the 2021 European floods through the insufficient use of warning messages by authorities and the delayed response by communities, as well as during the 2023 Maui wildfires with the absence of adequate preparatory and evacuation measures. Both events costed lives and caused widespread damages. Moreover, the COVID-19 pandemic sent shockwaves around the globe as local communities, health and emergency services, businesses, states, and regions were left both unprepared and struggling to effectively respond to the impacts of the crisis.

Events such as these are compounded even further by ongoing issues such as the climate emergency, and point to the cascading, multidimensional, and systemic nature of risks, which in turn require multi-hazard approaches to resilience building.¹ Indeed, in the wake of an ever-changing risk landscape, communities exposed to hazards must strengthen their capacities to resist, absorb, accommodate, adapt to, transform, and recover from the effects of hazards in a timely and efficient manner.² In line with the European Union's Disaster Resilience Goals³ and the Strategy on Adaptation to Climate Change⁴, this includes taking cross-cutting actions towards disaster risk reduction (DRR) and climate change adaptation (CCA) which will reduce vulnerability, exposure, and risk to hazards and strengthen the capacity of local communities to respond and recover.

In practice, this requires authorities and communities to adopt risk management approaches, which are inclusive and innovative, through pre-defined plans and procedures, as well as through adaptable and flexible capabilities to prepare for, respond to, and recover from disasters.⁵ It requires the implementation of policies at different levels (international to local) and strategies for increasing risk awareness and preparedness, which are co-developed and enabled through all-of-society engagement and participation, and hence strengthen resilience to disasters among authorities, decision-makers, private actors, intermediary actors, volunteers and citizens, and the most vulnerable.⁶



This document provides evidence-informed policy recommendations from 9 research projects, for strengthening an *all-of-society* approach to disaster resilience in two key areas.

First, the projects provide recommendations for enhancing **engagement among authorities** and citizens, highlighting actions towards competency building, knowledge sharing, participation, and collaboration in Disaster Risk Management processes. Thereafter, the projects outline recommendations for strengthening **targeted and two-way communication processes** among authorities and citizens, and address actions for making information accessible and for tailoring communication channels to match the needs of different members of the population.

The recommendations defined under these two key areas are fundamental for strengthening trust and increasing the capacities of the public to prepare and respond to disasters, and ultimately lead to more empowered and resilient communities. For each area, specific

recommendations are provided on two levels: first at the operational and strategic planning level of disaster management organizations, and second at the policymaking level. This is done to show the interdependencies and conditions needed across the two levels for the effective implementation of the recommendations.

Engaging Citizens in Disaster Risk Management

What does it mean?

Engaging citizens in Disaster Risk Management (DRM) involves developing strategies and methods to better incorporate the contributions of informal actors (e.g. citizens and volunteers) in preparing for risks and responding to the impacts of disasters.

How to put it into practice?



Build basic competence and knowledge around DRR and DRM in the population through events and education programmes:

Actions for civil protection authorities on strategic and operational levels:

- ◆ Organize events such as exercises, training, and workshops involving local authorities, emergency actors, hydromet services, and members of the population.
 - ❖ Events should be designed to create learning opportunities for all stakeholders involved, and serve as the basis for establishing mutual trust between citizens and authorities.
 - ❖ Events should be used to co-create and develop emergency preparedness plans, to systematically consider vulnerabilities and resilience potentials of diverse societies for various disaster situations, adapt mutual expectations among the different participants, and enable to jointly develop, test and improve procedures and tools.
 - ❖ Events should be used to target a better understanding of (local) risks, increase risk awareness, and enhance an understanding of different risk perceptions among different stakeholders.
 - ❖ Events should be targeted and consider diversity of members of the population, including cultural minorities and relevant groups with special needs, such as children or people with disabilities.



Actions for policymakers:

- ◆ Establish educational programmes around DRR and DRM at municipal and local levels, which enable cooperative action between local authorities and schools, and integrate schools into the planning and implementation phases of emergency response, ensuring they contribute to and benefit from resilience strategies.
 - ❖ Schools should be used as the starting place for developing knowledge about disasters, the actions that must be taken, and building basic competences within the population.
 - ❖ Courses focused on resilience and preparedness building should also be developed and integrated as part of regular curriculums, based on pedagogical objectives.
- ◆ Promote participatory democracy tools and practices in the areas of Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA).
 - ❖ Establish participatory requirements for decision and policy-making processes on EU, national, and local levels.
 - ❖ Allocate adequate resources for participatory and co-creation processes at local levels to facilitate civic engagement.



Establish relationships with population representatives to facilitate the participation of diverse groups in preparedness events and activities:

Actions at strategic and operational level for civil protection authorities, emergency management organizations, and first responders:

- ◆ Build relationships with relevant institutions and associations representing different groups within the population.
 - ❖ Work with intermediary actors such as social and community workers, as well as teachers and religious leaders, as these key figures in diverse communities can initiate dialogue on local vulnerability and resilience potentials and harness collective creativity to build preparedness culture.
 - ❖ Identify persons who can act as 'local ambassadors' within communities to facilitate continuous dialogue on the needs and expectations of both authorities and diverse groups, and to share local knowledge and build trust.
- ◆ Work with citizen representatives to identify to what extent the concepts of preparedness and safety culture are embedded in a defined group.
 - ❖ Establish an actionable methodology to ensure that where gaps are identified, measures are taken to strengthen preparedness safety culture among said groups, such as through co-developed awareness campaigns and sensitization campaigns in schools.

Actions for policymakers:

- ◆ Recognise the role citizens in the DRM cycle from preparedness to response and recovery.
 - ❖ Policymakers and municipal and local levels should promote the establishment of official citizen committees/elect citizen representatives that will take part in DRM exchanges.





Integrate actions among authorities and the population:

Actions at strategic and operational levels for civil protection authorities, emergency management organizations, and first responders:

- ◆ Identify and consider supporting initiatives (e.g. resource mobilization, local expertise) from the population in preparatory phases, which can be utilized during response and recovery times, when official resources are already stretched and local needs might not be met.
 - ❖ Use preparatory actions (e.g. via joint events, see above) to identify supporting initiatives and to enhance expectations that citizens have towards authorities as well as expectations that authorities can have towards citizens (self-preparedness and/or resources of spontaneous volunteers).
- ◆ Strengthen your organization's capacity to manage spontaneous volunteers from the population:
 - ❖ Establish digital volunteer hubs for onboarding and training to build the relevant capacities for spontaneous volunteers.
 - ❖ Use dedicated online spaces such as websites as "digital hubs" to clearly define the expectations for citizen volunteers and authorities, to increase safety with ID checks, and to reach and train volunteers with e.g. appropriate skillsets.
 - ❖ Create specific liaison positions in your organization to facilitate the tracking, integration, and potential redirection of spontaneous volunteers.
 - ❖ Establish volunteer mobilization centres as formal bodies that can be activated and mobilized during a disaster. Citizens enrolled in the centres should have access to regular professional training in emergency response training as well as being involved in key meetings and preparatory planning.
 - ❖ In the response phase, consider the competences, resources and information available from members of the population already on scene.
 - ❖ Integrate strategies for spontaneous volunteers in your organization, which clearly state onboarding procedures in all phases of disasters, what tasks they can conduct in specific incidents, and how they can be deployed (e.g. example only in pairs/groups), and how insurance and liability issues should be addressed.

Actions for policymakers on local, municipal, and national levels:

- ◆ Recognize and promote the overall positive contribution of the population in response and recovery efforts.
- ◆ Ensure that during the drafting of policy documents, appointed citizen representatives, (including representatives from vulnerable groups) are included in the discussions and document-writing process.
- ◆ Review and revise disaster and crisis management doctrines to better leverage spontaneous contributions from the population.
- ◆ Promote and provide funding for digital volunteer hubs and in-persons volunteer mobilization centres.
- ◆ Understand that nuance is necessary when utilizing terminology to refer to citizens which reflects the various roles that they play throughout the DRM cycle and the way they see themselves.

Strengthening Disaster Communication

What does it mean?

Effective **disaster communication** requires targeted and two-way exchanges and processing of risk and crisis related data, information, and knowledge among different stakeholders including authorities, scientists, businesses, and the general public. Ultimately these inclusive communication processes will lead to increased citizen engagement, enhanced trust among authorities and citizens, and more efficient use of resources for Disaster Risk Management (DRM).

How to put it into practice?

Target communication towards different audiences:



Actions at strategic and operational levels for civil protection authorities, emergency management organizations, and first responders:

- ◆ Tailor and target your communication channels and information to be accessible to all members of society, which means considering the needs of people with different socio-demographic characteristics such as age, gender, nationality, language, social networks, religion, ethnicity, economic resources, disabilities, and other vulnerabilities.
 - ❖ Meet with different target groups in preparatory phases to identify their information needs, advice, local knowledge, and preferred media.
 - ❖ Encourage the formation and recruitment of digital mediators, i.e. people with digital skills specifically trained to support people with vulnerable profiles and to increase their engagement.
 - ❖ Ensure communication is equitable, meaning that the access and distribution of information addresses the needs of all members of the community, including vulnerable or marginalised populations, to avoid exacerbating existing inequalities. This can be done by providing information in multiple languages or through various communication channels such as social media platforms, multilingual radio and television broadcasts, community meetings, community leaders, NGOs, schools and networks.

- ❖ Ensure communication is accessible, meaning that information is available and understandable to all members of the community, regardless of their abilities, disabilities, or language proficiency. This can be done by providing information in plain (and different) language, avoiding symbols and acronyms, and providing keyboard navigation and transcription support functions on digital applications.
- ❖ Ensure communication is acceptable meaning that information is delivered in a manner that is culturally sensitive, respectful, and acceptable to the diverse values and norms within a community. This can be done by engaging community leaders (e.g. religious leaders, business owners, educators) to align communication needs with cultural practices, preferences, and sensitivities, and can foster greater trust and cooperation of the community in disasters.
- ◆ Develop a target communication strategy addressing all DRM phases.
 - ❖ Implement a targeted communication strategy into the organization's existing planning and training documents during the preparedness phase to allow for an iterative process, with room for testing, feedback, change and follow-up activities.
 - ❖ Establish post-disaster response groups within the community and implement continuous monitoring, evaluation, and follow-up on communication actions, to gather feedback on key challenges, gaps, need, and best practices, as well as what has worked or not before, during, and after an event from the citizen perspective.

Actions for policymakers:

- ◆ Promote and allocate resources to disaster management organisations on national, municipal, and local levels for investments in inclusive disaster communication practices, digital applications, and expertise (for example, trained digital mediator).
- ◆ Increase capacity of hydromet/scientific agencies who operate on all levels to generate forecasts and warnings that are localized, meaningful, and action-orientated for different target groups e.g. impact-based forecasting initiatives.
- ◆ Allocate funding for hiring science communication experts which can help authorities on national, municipal, and local levels to interpret and craft scientific information and data into understandable and actionable information for the public.
- ◆ Ensure policies concerning social welfare and public information on a national level support the development of a more equal and democratic society.
- ◆ Leverage potential public-private partnerships with private sector organizations on national, municipal, and local levels to provide an additional platform of outreach to the general population (including vulnerable groups).
- ◆ Funding proposals (e.g. for research projects) should be recommended and adapted on EU and national levels in order to delve deeper into these issues and foster change.

Establish two-way communication processes between authorities and citizens:



Actions for civil protection authorities and emergency management organizations at strategic and operational levels:

- ◆ Set up two-way communication channels (digital and non-digital) such as emergency helplines, social media platforms, mobile apps, community meetings and forums, and the use of community leaders and networks.
 - ❖ Identify the communication channels of different demographics within the population, including the most vulnerable.
 - ❖ Tailor your organization communication platforms, channels, and information to enable two-way dialog with the population.
- ◆ Manage two-way communication information:
 - ❖ Identify the types of information which can be most beneficial to collect from the population in all phases of disasters. For example skills and capacities from different groups in the population, and citizen insights and experiences which can be helpful in decision-making that is rooted in local realities and contexts.
 - ❖ Design consistent messaging and communication that is inclusive and adaptable to different needs.
 - ❖ Recognize that communication should be continuous and is reliant on creating the right conditions in order to be effective. For instance, the role of trust has been recognized for its influence on the willingness to accept and act upon information. Therefore work to build trust with the population by ensuring that information shared from your organisation is timely, reliable, and valid.
 - ❖ Use social media platforms and other information channels which employ safeguards to filter and block misinformation and offensive comments (i.e. hate speech, hoaxes).
 - ❖ Implement safeguards (e.g. fact checkers, AI) to eliminate offensive messaging and to mitigate misinformation on the digital applications and information channels of your organization.



Actions for policymakers:

- ◆ Promote and allocate funding towards the implementation of safeguards for the management of misinformation on the digital applications and channels of public institutions who operate on all levels.
- ◆ Set policy priorities towards the implementation of safeguards for the management of misinformation by social media platforms providers on an EU level, in order to force accountability and responsibility.
- ◆ Adopt language within policies on national, municipal, and local levels that sets the tone for establishing citizens as equal and competent stakeholders in DRM. For example, avoid language that perpetuates the view of citizens as actors without agency or as an impediment to the work of formal actors.
- ◆ Establish mechanisms and spaces at regional and local levels, for instance physical meetings at a community centre or an online forum, to facilitate engagement among disaster management organizations, local community representatives, and other relevant actors to ensure that people coming from different cultural backgrounds are both heard and informed.

Further Reading

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Notes

- 1 *Report of the Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 (UNDRR)*.
- 2 *Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (UNDRR)*.
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Contributors

- ◆ BuildERS: Kati Orru, University of Tartu
- ◆ BuildERS: Sten Hansson, University of Tartu
- ◆ CORE: Melissa Scott, Public Safety Communication Europe
- ◆ CORE: Raffaella Russo, University of Salerno
- ◆ CMINE: Jon Hall, Resilience Advisors Network
- ◆ DIRECTED: Lydia Cumiskey, University College Cork
- ◆ DIRECTED: Max Steinhausen, Technische Universität Braunschweig
- ◆ DIRECTED: Pia-Johanna Schweizer, Research Institute for Sustainability Helmholtz Centre Potsdam
- ◆ ENGAGE: Alexandra Olson, European Emergency Number Association
- ◆ ENGAGE: David Wales, European Emergency Number Association
- ◆ ENGAGE: Matthieu Branlat, SINTEF
- ◆ LINKS: Camilla Froio, University of Florence
- ◆ LINKS: Emmanuel Raju, University of Copenhagen
- ◆ LINKS: Kees Boersma, Vrije University Amsterdam
- ◆ LINKS: Nathan Clark, Vrije University Amsterdam
- ◆ LINKS: Nina Blom Andersen, University College Copenhagen
- ◆ LINKS: Robert Larruina, Vrije University Amsterdam
- ◆ LINKS: Tejal Patil, Vrije University Amsterdam
- ◆ MEDIATE: Abdelghani Meslem, NORSAR
- ◆ PARATUS: Cees van Westen, University of Twente
- ◆ PARATUS: Funda Atun, University of Twente
- ◆ RESILOC: Ramona Velea, Institute of International Sociology Gorizia
- ◆ RESILOC: Sjirk Meijer, Crisis Management Innovation Network Europe
- ◆ RISKPACC: Guillaume Brumter, European Organisation for Security
- ◆ RISKPACC: Maike Vollmer, Fraunhofer Institute for Technological Trend Analysis

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For more information on this brief, contact Jon Hall at jon.hall@resilienceadvisors.eu

