RiskPACC

INTEGRATING RISK PERCEPTION AND ACTION TO ENHANCE CIVIL PROTECTION-CITIZEN INTERACTION

TRAINING MATERIAL

Deliverable D4.6

Dissemination Level: Public

RiskPACC

Integrating Risk Perception and Action to enhance Civil Protection-Citizen interaction

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Main author(s)	Christina Gatsogianni (KEMEA)
Contributor(s)	
Internal reviewer(s)	Vangelis Pitidis (UoW), Aulia Sukma (UT)

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ABOUT RISKPACC

Increasingly complex and interconnected risks globally highlight the need to enhance individual and collective disaster resilience. While there are initiatives to encourage citizen participation in creating a resilient society, these are typically fragmented, do not reach the most vulnerable members of the communities, and can result in unclear responsibilities for building disaster resilience.

New technologies can also support preparedness and response to disasters, however, there is limited understanding on how to implement them effectively. Awareness of risks and levels of preparedness across Europe remain low, with gaps between the risk perceptions and actions of citizens and between the risk perceptions of citizens and Civil Protection Authorities (CPAs).

The RiskPACC project seeks to further understand and close this Risk Perception Action Gap (RPAG). Through its dedicated co-creation approach, RiskPACC will facilitate interaction between citizens and CPAs to jointly identify their needs and develop potential procedural and technical solutions to build enhanced disaster resilience. RiskPACC will provide an understanding of disaster resilience from the perspective of citizens and CPAs, identifying resilience building initiatives and good practices led by both citizens (bottom-up) and CPAs (top-down). Based on this understanding, RiskPACC will facilitate collaboration between citizens, CPAs, Civil Society Organisations, researchers and developers through its six (6) case studies, to jointly design and prototype novel solutions.

The "RiskPack" toolbox/package of solutions will include a framework and methodology to understand and close the RPAG; a repository of international best practice; and tooled solutions based on new forms of digital and community-centred data and associated training guidance. RiskPACC consortium comprised of CPAs, NGOs, associated organisations, researchers and technical experts will facilitate knowledge sharing and peer-learning to close the RPAG and build disaster resilience.

TABLE OF CONTENTS

List of Tables

List of Figures

Executive Summary

Deliverable D4.6 serves as the second and final part of the training material of RiskPACC, fulfilling a critical milestone aiming at enhancing user understanding of the Collaborative Framework and the Repository of the Good Practices as established within the project. This comprehensive training resource has been designed to meet the needs identified during the project, using a variety of techniques, methods and tools to facilitate a clear understanding of basic principles among users.

Building on insights gathered from testing of the Efus cities and the Knowledge Exchange Events (KEEs), this revised deliverable transitions from its prior iteration to offer a more user-friendly experience. It creates a familiar environment for readers, guiding them safely through the platform's functionalities. It also created a full guide of guidelines to enhance CPAs' and citizens' preparedness and guide them to achieve efficient communication with surrounding social groups, thereby promoting a cohesive understanding of civil protection issues.

To ensure that users gain a comprehensive understanding of how all tools (both technical and conceptual), methods and techniques within and beyond RiskPACC collaborate, the training also provides a structured, step-by-step approach based on the Framework's modules specifically designed for CPAs.

Overall, D4.6 not only equips users with the essential knowledge and skills for improved disaster preparedness but also fosters robust communication skills, thereby contributing to the overarching goals of community resilience and safety, facilitating in closing of the Risk Perception Action Gap (RPAG).

Glossary and Acronyms

Term	Definition/Description
CDC	Centers for Disease Control and Prevention
CPA	Civil Protection Authority
D3.8	Report on knowledge exchange
D4.4	RiskPACC Collaborative Framework
DoA	Description of the Action
Efus	The European Forum for Urban Security (Efus)
FEMA	Federal Emergency Management Agency
ISAR	I.S.A.R. Germany Stiftung gGmbH
RPAG	Risk Perception Action Gap
T4.2	Repository of good practices – creating the Knowledgebase
T4.3	RiskPACC Collaborative Framework
T4.4	Development of training material
T6.2	Test Planning
VGI	Volunteered geographic information
WP3	Co-Creation lab & Stakeholder-Integration
WP4	Framework Development
WP6	Impact generation through peer-learning, field testing and knowledge capitalisation
WP8	Dissemination, Exploitation and Communication

TABLE 1: GLOSSARY AND ACRONYMS

1 INTRODUCTION

1.1 Overview

D4.6 represents a significant milestone in the RiskPACC project, encapsulating the development of comprehensive training materials specifically designed to address the diverse needs identified in Tasks 4.2 "Prototype Knowledgebase Repository" and 4.3 "RiskPACC Collaborative Framework." As the second and final deliverable of Task 4.4, "Development of Training Material," this document serves as a public report aimed at ensuring accessibility and engagement for a wide audience. It outlines the key insights derived from training initiatives developed and tested within the project, which are seamlessly integrated into the interactive RiskPACC platform.

The primary objective of this deliverable is to provide user-friendly training resources that facilitate the adoption and sustainability of RiskPACC solutions and methodologies. The training materials are structured around the four basic modules of the collaborative RiskPACC framework:

- Understanding of risk and community.
- Sharing of knowledge and risk perceptions between different participant types.
- Relating - developing relationships of trust between citizens and civil protection groups.
- Building techniques and tools for communication.

The tools and solutions developed within this Task, are designed to meet the unique needs of stakeholders and target audiences defined under the project's scope in order to bridge the Risk Perception Action Gap (RPAG) between citizens and CPAs. The training materials aim to ensure optimal assimilation by users, thereby promoting engagement with the overarching principles and objectives of RiskPACC.

This final training material document reflects the valuable lessons learned from the testing phase across the Efus network, introducing two new training resources that emerged during the second phase of Task 4.4. These include essential guidelines for CPAs on how to communicate effectively within diverse demographic communities, as well as a step-by-step implementation strategy that outlines the actions needed in order to facilitate CPAs to achieve effective communication with their respective communities. In addition, the document includes a comprehensive guide that summarises the key points as referred to in the draft version of the training D4.5, as well as the guidelines finalized within this document.

In more detail, this deliverable considers the following aspects:

- Insights gained from the testing conducted with the Efus cities, that are specifically addressed in T6.2.
- Feedback stemming from the final version of the Collaborative Framework.
- Results from the assessment of the tools came out during the discussion sessions of the Knowledge Exchange Events conducted in T3.6.

Consequently, the training material in this final version contains a series of manuals and guidebooks, which are integrated into the RiskPACC platform. These resources include:

- Guidelines for CPAs on effective communication with citizens and diverse communities.
- A step-by-step communication strategy tailored to the modules of the Collaborative Framework.
- An overarching guidebook that consolidates all the critical aspects of the Framework, described both in the draft and final version.

In summary, the final version of the training materials has been significantly refined and enriched by the lessons learned from the project's testing activities, providing a robust scaffold for the knowledge dissemination and community engagement that is critical to the success of the RiskPACC project.

1.2 Structure of the deliverable

This document includes the following chapters:

Chapter 1: Introduction
This chapter provides an overview of the deliverable, outlining its basic description and scope, as well as the overarching objectives of T4.4.

Chapter 2: Lessons Learned
This chapter summarises the lessons learned from the Efus workshops and KEEs, which were instrumental in refining the training materials.

Chapter 3: Training Material Content
This chapter describes the final content of the training materials as they evolved from the draft version of the training after applying the lessons learned from the workshops and the final materials developed in the second phase of the current task.

Chapter 4: Communication Guidelines
This section outlines essential "Dos" and "Don'ts" for CPAs, aimed at enhancing their preparedness and communication with citizens and diverse communities.

Chapter 5: Framework Flowmap Description
This chapter describes the Framework Flowmap, a comprehensive communication strategy designed to help users effectively navigate the tools developed within RiskPACC.

Chapter 6: Conclusions and Recommendations
The final chapter summarises the key findings of the document and offers suggestions for future enhancements to the training materials.

Chapter 7: Annexes

This section contains additional materials such as the Framework Guidebook and the implementation version of the Framework Flowmap.

1.3 Relation to other Work Packages

The training material is closely linked to other WPs of the project. As described in the Description of the Action (DoA), this deliverable is aligned seamlessly with all outputs from WP4 since it is fundamentally based on the Knowledgebase of the Repository and the Collaborative Framework.

This final version of the training material is informed by and aligned with the final version of the Collaborative Framework outlined in D4.4. It also incorporates valuable insights and lessons learned from various workshops conducted within the project, including the Efus city testing workshops in WP6 and the awareness workshops held in WP8, where participants had the opportunity to navigate within the RiskPACC platform and test the project's solutions and tools, including the integrated training material.

In addition, there is a strong link with WP3 as the final version of the training entitled "the Flowmap Framework" was piloted during KEE#3, with the results of this evaluation to be fully detailed in D3.8. The recommendations contained in D3.8 have also been taken into account to finalise the guidelines that follow this document.

Overall, the training material is a key component that brings together different elements from different WPs, promoting collaboration and effective dissemination of knowledge throughout the project.

2 LESSONS LEARNED FROM THE WORKSHOPS

This chapter delves into the valuable lessons learned arising from the diverse testing of the RiskPACC platform and its training tools.

The first essential key point was the testing workshops held with the Efus cities. A series of different workshops occurred in five different municipalities part of the Efus network, Heidelberg, Setubal, Kalamaria, Gdansk and Karlsruhe, focusing on the evaluation of the platform alongside its tools and solutions. Significant outcomes were gathered through the testing of the RiskPACC Game created as part of the physical Risk Pack, an initiative that serves as a critical strategic asset for CPAs. Finally, the KEE workshops provided a vital forum for evaluating and refining these tools, fostering rich discussions on their practicality and effectiveness. This chapter aims to consolidate the key insights and findings that emerged from these testing sessions and discussions, which are detailed below.

Efus workshops were conducted under WP6, the results of which are detailed in D6.2. Participants from the Efus cities were given access to the RiskPACC platform to familiarize themselves with the project's various solutions. These workshops primarily emphasized testing technological tools, with less focus on the evaluation of the conceptual tools, the framework and the repository of good practice, which hindered the opportunity to gather clear feedback on their effectiveness and possible areas for improvement.

Therefore, as documented in D6.2, workshops focused mostly on the assessment of the technical tools and the platform. However, testing the RiskPACC game was a crucial point in deriving more useful outputs, since facilitated participants' understanding of the conceptual tools and assisted them in strategizing with both RiskPACC 's technical and conceptual resources.

Diverse teams approached the exercise with different objectives in mind, leading them to select varying tools, through which they identified several important insights regarding the conceptual tools, such as:

- The risk communication exercise proved beneficial in fostering effective communication. It enabled participants to acquire essential knowledge and skills, better understand risks and engage in meaningful discussions with citizens about their risk perceptions.
- Participatory mapping-lite exercise enhanced understanding of affected neighbourhoods by dividing the city into manageable sectors. This process included mapping points of interest and prioritising assistance for those in need.
- Nudging was also highlighted as a strategy to motivate citizens to engage with an app for information, as well as to prepare and organise volunteers and spontaneous helpers in response to emergencies.
- Co-creation is valuable for fostering dialogue around risks. "Old Town Café" methodological approach could convene citizens and volunteers to share experiences and knowledge by encouraging collaborative input.

A deeper analysis was conducted through Knowledge Exchange Events (KEEs), where participants from both the RiskPACC project and Efus cities exchanged insights about tools within and beyond the RiskPACC project. They had the opportunity to evaluate the implementation results of these tools from Laboratory Phases I and II where all tools were tested, discussing their strengths, and weaknesses, and offering recommendations for improvement. Detailed results of this analysis are found in D3.8.

Notably, while feedback from both the Efus workshops and KEEs did not suggest major changes to the content of the conceptual tools, recommendations emerged that, for instance, the participatory mapping exercise might be more effective if adapted into a more interactive or gamified format for children. Although such recommendations are valuable for improving the conceptual tools to adjust in more community groups, their realisation was not feasible at this stage of the project due to the extensive testing

and development required. However, they can inform future initiatives. In the meantime, this feedback was instrumental in refining the guidelines provided to CPAs in order to facilitate them to communicate effectively with their communities. These guidelines have been developed under the second phase of the current Task and have been integrated into this deliverable.

Efus Cities highlighted that the RiskPACC platform's extensive range of solutions was overwhelming, making it difficult for users to navigate and find a starting point. Furthermore, participants found the Framework confusing and struggled to grasp its primary purpose and noted that they would like to see more attention to the conceptual tools.

These observations led to an overhaul of the training materials, especially regarding their different format integrated into the platform. On that note, it was crucial to assess the essential content and formats needed and ensure that the platform was not overloaded with redundant material. Details of the finalised training content are elaborated in Chapter 3.

Additionally, the need for clarity on how to effectively integrate these tools and resources into a comprehensive risk communication strategy led to the development of the Framework Flowmap, the last piece of the training material. Framework Flowmap serves as a roadmap guiding users in crafting an effective communication strategy by co-utilising all available technological and conceptual tools, methods, practices, and resources of RiskPACC, tailored to their expertise and the unique characteristics of their communities. This exercise provided participants with practical insights into the Collaborative Framework's application, enhancing their understanding of its functionality. This exercise is fully described in Chapter 5 of the deliverable, with the implementation outcomes from KEE#3 to be documented in D3.8.

3 FINAL DESIGN OF THE TRAINING MATERIAL

This chapter provides an overview of the final training materials incorporated into the platform, after the integration of the lessons learned from the Efus cities workshops and the KEEs.

3.1 Final colour palette

As mentioned in D4.5, the colour palette is a crucial element that enhances memory retention and aids users in effectively navigating and absorbing information.

During the second design phase and prior to the Efus and Awareness workshops, discussions were held with the Collaborative Framework partners and the platform's technology partner about the final colour palette of the Framework modules. Following a collaborative deliberation, it was agreed that the palette would closely follow the primary colours of the project, as depicted in Figure 1 that follows.
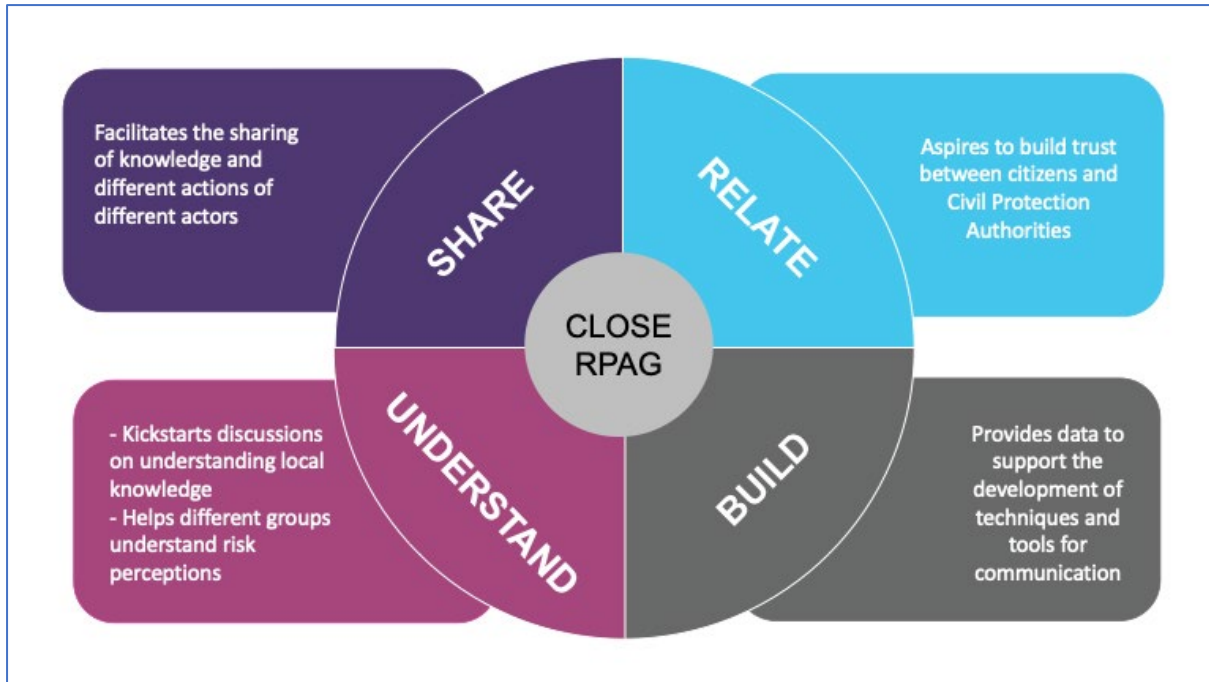
FIGURE 1: RECOLOURING THE RISKPACC COLLABORATIVE FRAMEWORK

Subsequently, all training materials, as presented in the draft version, including both print resources and videos, were revised and re-uploaded to the platform.

3.2 Content of the Training Material in the Platform

Taking into account the observations from the Efus cities, in order to maintain consistency and limit the overloading of the platform, the training described in D4.5 has been revised as follows:

- Collaborative Framework - in video format.
- The Repository of Good Practices - in video format.
- Co-creation methodology – in video and PDF format.
- Participatory mapping – one brief video that involves the aim of the exercise and the usefulness of Volunteered geographic information (VGI) tools, a full guide in video and PDF format.
- VGI tools – in PDF format.
- Risk communication exercise - a full guide in video and PDF format.
- Nudging technique – a user story of tracking apps as developed in the ISAR case study to show how nudging can be implemented.

3.3 Guidelines design

Following the completion of the local workshops of Lab Phases I and II, valuable insights were sought from the case study providers based on their professional experiences and lessons learned throughout the project. They were asked to share key guidance for CPAs on how they should act when engaging with citizens and different audiences in relation to the four modules of the framework: Understanding, Sharing, Relating and Building.

To facilitate this process, they were provided with a structured excel template including some examples, with the form as given in the following Figure 2.

FIGURE 2: THE DRAFT EXCEL SHEET FOR THE GUIDELINES

Each partner was tasked with outlining actionable instructions for CPAs – particularly some 'Dos' and 'Don'ts' - concerning their interactions with diverse communities identified as key participants in the project. These communities included citizens, volunteers, the elderly, children, people with disabilities, immigrants, women, and other hard-to-reach groups. It was emphasized that the contributors should look beyond the specific target group of the workshops and incorporate insights from their wider professional experience or from insights they collected during the workshops. Specifically, the following guidelines were given to them:

1	Make guidelines regarding the solutions that came up from workshops and your experience.
2	Include guidelines regarding the use of the apps
3	Include guidelines not only for the target group that was participating in your workshops. Use the results of the conversations that you had during the workshops and from your professional experience and try to fill guidelines and for other target groups. It is not necessary to fill or add guidelines for all the target groups.

TABLE 2: THE NOTES GIVEN TO THE CASE STUDY OWNERS TO CONTRIBUTE TO THE GUIDELINES

Most of the guidelines shared were common enough, but there were also guidelines mentioned only by one or two partners. It is worth noting that the recommendations from the case study owners are closely aligned with those generated during the discussion sessions in the KEEs. To address any overlaps, a comprehensive review was conducted taking into account also the recommendations documented in D3.8, resulting in a refined set of final guidelines. These finalized guidelines are detailed in Chapter 4 and are included in the comprehensive guidebook in Annex 1.

3.4 Framework Flowmap

As a final step of the training material, in order to communicate how all these various concepts, tools, solutions and resources are interconnected for developing a robust communication strategy, a Framework Flowmap has been designed. This Flowmap serves as a step-by-step guide, structured around the four modules of the Framework, and consists of five key steps.

The main aim of the Flowmap is to provide users with a comprehensive guide that illustrates how both RiskPACC and external tools align with the Framework modules. The Flowmap acts as a strategic roadmap that communication professionals and CPAs can follow from inception to completion, ensuring clarity and coherence in their approach.

Additionally, the Flowmap was tested and therefore validated during KEE #3, which also included participants from the Efus network, further confirming its practical relevance. The main description of the Framework Flowmap follows in Chapter 5 with the main exercise in Annex 2, and the main analysis of its testing in D3.8.

3.5 The Framework Guidebook

The Framework guidebook, as mentioned in D4.5, serves as a comprehensive resource for CPAs to enhance their understanding of the key concepts within the RiskPACC Collaborative Framework. It provides a detailed overview of the various conceptual and technological tools associated with the Framework, as well as clear guidance to help CPAs identify best practices and practices to avoid.

The guidebook aims to help users identify the primary objective of the framework and apply its guidelines effectively. By following these guidelines, users will gain insight into the diverse needs of different social groups in their community, build engagement with these groups and ultimately bridge the RPAG.

The guidebook contains the following chapters:
1. Aim of RiskPACC
2. The Collaborative Framework. It contains the key points referred to in D4.5.
3. The Repository of Good Practices. It describes the main purpose of the Repository.
4. Technological tools: It contains a brief description of the tools and how they are connected with the Collaborative Framework as has been described in D4.5.
5. The conceptual tools: It gives a brief description of the main purpose and aim of these tools.

6. Guidelines for communication. The guidelines are presented in the following Chapter 4, with the main characteristics of each group.
7. The Framework Flowmap, as an example of how to build a risk communication under the modules of the Collaborative Framework.

The Framework Guidebook is attached in Annex 1.

4 THE GUIDELINES

As previously mentioned, essential guidelines are designed to assist CPAs in implementing fundamental practices for effective communication with citizens and broader social groups in their communities, always considering their specific needs.

These guidelines were conducted with the help of the case study owners, taking also into account the recommendations from the discussion sessions from KEEs, and consist of:

- Guidelines for CPAs on how to improve their efficiency overall and how to achieve efficient communication with citizens.
- Guidelines for CPAs on how to communicate effectively with the elderly.
- Guidelines for CPAs on how to communicate effectively with children.
- Guidelines for CPAs on how to communicate effectively with immigrants.
- Guidelines for Citizens to enhance their preparedness for a variety of natural hazards.
- Guidelines for Volunteers on how to collaborate and communicate effectively with CPAs and citizens.

These guidelines are integrated into the Framework Guidebook attached in Annex 1.

4.1 Guidelines for CPAs to improve themselves and their communication with citizens

The guidelines followed are designed to empower CPAs to enhance their professional development and strengthen their communication with citizens.

Stay Informed and Engage in Continuous Learning
Do:
- ✓ **Participate in professional development**: Attend workshops, conferences, and training sessions regularly to keep abreast of changes in legislation, regulations and best practices.
- ✓ **Research changes in legislation**: Keep up to date with new plans and regulations from the central government that affect your area of work.
- ✓ **Review training resources**: Use available resources to learn about new strategies for engaging with communities and understanding citizens' perceptions.

Don't:

– **Neglect professional development**: Avoid skipping the responsibility of continuous learning. In an evolving field, it is vital to keep up to date.

– **Isolate yourself professionally**: Don't ignore networking opportunities that can help you gain valuable insights from other professionals.

Community Vulnerability and Risk Assessment

Do:

✓ **Create an inventory of local vulnerable groups**: Identify groups that are particularly vulnerable in your territory.

✓ **Engage with vulnerable populations**: Use direct dialogue and surveys to find out about their risk perceptions and expectations.

✓ **Develop targeted communication strategies**: Develop approaches that take into account the vulnerabilities and needs of identified groups in your community.

✓ **Utilise family and trusted persons:** Involve family members or trusted people (such as general practitioners) to help pass on information. This can create a sense of comfort and trust in the message being delivered.

Don't:

– **Assume that there is a homogeneous risk perception for everyone**: Avoid generalising risks for the entire population. You should understand the diverse needs of different groups.

– **Ignore feedback**: Don't dismiss or overlook what community members have to say about their perceptions and experiences.

Information Collection and Public Engagement

Do:

✓ **Organize surveys and community activities**: Use methods such as participatory mapping and questionnaires to collect data about citizens' risk perceptions.

✓ **Share clear, accessible, and engaging information**: Use multiple communication channels such as print, social media and community meetings to share information effectively.

✓ **Communicate in the individual's mother tongue:** When dealing with elderly and vulnerable groups, always prioritize their primary language. Use translation services if necessary to ensure comprehension and respect for cultural perspectives**.**

Don't:

– **Overlook non-digital populations**: Don't rely solely on digital communication methods; ensure that information reaches everyone, including those who are not digitally connected.

– **Neglect clarity and simplicity**: Do not complicate communications. Use simple language and clear instructions.

Build Trust and Collaboration

Do:

- ✓ **Engage with local organisations**: Collaborate with schools, community organisations, and other local CPAs to foster trust and cooperation.
- ✓ **Incorporate community feedback into planning**: Actively involve citizens in planning emergency response activities and risk communication strategies.
- ✓ **Establish continuous dialogue**: Maintain regular communication with community members to adapt strategies as situations evolve. Create an open dialogue where citizens, especially the elderly, and people with low self-esteem feel comfortable asking questions. Reassure them that no question is too simple or insignificant.

Don't:

- – **Work in isolation**: Avoid acting independently of other CPAs or organisations. You should foster cooperation and coordination.
- – **Dismiss citizen input**: Don't ignore or underestimate the input and feedback you receive from the community on your risk management policies.

Risk Communication

Do:

- ✓ **Utilise diverse types of communication**: Provide updates through multiple channels. Ensure availability in formats accessible to people with disabilities. Especially for the elderly and people who are hard to reach, share information using diverse formats—flyers, brochures, and newsletters. Ensure these materials are visually clear, with simple language and large print.
- ✓ **Ensure continuous improvement of apps**: Regularly update applications to keep them up-to-date and user-friendly.
- ✓ **Set clear expectations**: Communicate actionable steps that citizens can take before, during and after emergencies to improve preparedness.

Don't:

- – **Engage in one-way communication**: Avoid communications that do not encourage feedback or interaction from the audience.
- – **Use complex applications**: Don't implement applications that are not user-friendly or too complicated for the average user.

Training and Education

Do:

- ✓ **Develop tailored training materials**: Create targeted training materials that are suitable for different age groups (children, older people) and for people with disabilities.
- ✓ **Organize training and educational initiatives**: Organise conferences and workshops to raise awareness and educate different community groups about risks and preparedness.

Don't:

- – **Overlook aftercare**: Avoid failing to provide citizens with follow-up information and support after a crisis.
- – **Deliver ineffective training**: Don't provide training that lacks clarity or is not tailored to the audience's needs.

These guidelines can significantly enhance CPAs' engagement with their communities, improve public awareness of risk, and effectively contribute to resilience-building efforts in their respective areas.

4.2 Guidelines for CPAs to communicate effectively with the elderly

Effective communication with elderly individuals about climate risks and safety measures requires sensitivity, awareness, and adaptability. The following guidelines outline what CPAs should and should not do to ensure that their messages are clear, respectful, and actionable.

CPAs should:

- ✓ **Utilise family and trusted persons**
  - o Involve family members or trusted individuals (like general practitioners or community leaders) to help in delivering the information. This can create a sense of comfort and trust when the messages are delivered.

- ✓ **Communicate and provide information in various formats and methods**
  - o Share information using a variety of different formats, such as leaflets, brochures and newsletters. Ensure that these materials are visually clear, with simple language and large print.
  - o Use a variety of communication channels and methods, such as face-to-face meetings, community events, home visits and mailings. This allows for personal interactions that can help ensure understanding.

- ✓ **Communicate in the individual's mother tongue**
  - o Always prioritise the native language of the elderly. If necessary, use translation services to ensure understanding and respect cultural perspectives.

- ✓ **Maintain simplicity of information**
  - o Ensure that the information provided is simple and free of technical and scientific notions. Use bullet points, illustrations and clear headings to improve understanding and readiness.

- ✓ **Encourage questions**
  - o Create an open dialogue where older people feel comfortable asking questions. Reassure them that no question is too simple or insignificant and that everyone matters.

- ✓ **Collaborate with retirement and nursing homes**
  - o Collaborate with local retirement and nursing homes to develop, disseminate, and implement hazard-related risk and emergency plans tailored to the specific needs of their residents.

- ✓ **Follow up**

- o Follow up after the initial communication to ensure that elderly and their families fully understand the information and processes outlined.

CPAs should not:

- – **Avoid overreliance on technology and avoid using only online tools**
  - o Do not depend exclusively on technological solutions, digital websites, or apps, as many elderly may not have access to or be familiar with digital tools. Ensure that any technological solutions are incredibly user-friendly and be accessed also offline.

- – **Do not assume familiarity with common tools**
  - o Do not assume that elderly individuals are familiar with apps, websites, or even conventional communication technology. Always prefer methods they are more likely to understand.

- – **Avoid information overload**
  - o Do not overload with excessive information. Use key points and actionable guidelines for clear understanding.

- – **Refrain from technical language**
  - o Avoid using complex or technical language, as this can lead to confusion and misunderstandings.

- – **Do not rush communication**
  - o Allow enough time for questions and discussion. Rushing communication can make older people feel undervalued and lead to a lack of understanding.

- – **Avoid dismissing concerns**
  - o Never underestimate or ignore the concerns of older individuals. Their experiences and worries should be taken seriously and addressed respectfully.

By following these guidelines, CPAs can facilitate effective communication with older people to ensure they are informed about climate risks and can take effective, safe action. This practicality ensures better preparedness and builds trust in CPA professionals.

4.3 Guidelines for CPAs to communicate effectively with children

CPAs should follow these guidelines to ensure their message is clear, engaging, and age-appropriate.

CPAs should:

- ✓ **Implement gamification**
  - o Incorporate toys, games and interactive technology, such as apps and computers, to make the topic that you need to communicate relatable and engaging for children.

- o Use participatory mapping exercises using visual aids such as LEGO, Playmobil, or other tangible items to help children understand concepts more clearly.

✓ **Develop age-appropriate materials**
- o Create educational materials that are appropriate for the children's age group, with illustrations and interactive elements to keep them engaged.
- o Provide resources like videos, quizzes, and questionnaires to reinforce learning in a fun and interactive way.

✓ **Encourage open communication**
- o Foster an environment where children feel safe to ask questions about risks and hazards. Recognise their curiosity as a valuable opportunity for education.
- o Be transparent and honest while discussing risks, providing age-appropriate information that empowers rather than instills fear.

✓ **Promote pre-emptive risk education**
- o Educate children about potential risks and preventative measures early on, equipping them with actionable knowledge for when risks manifest.
- o Integrate lessons on resilience and risk awareness into the compulsory school curriculum, beyond basic emergency procedures.

✓ **Collaborate with educators**
- o Work closely with teachers to create joint educational experiences such as workshops, visits to local services (fire, police) and hands-on demonstrations.
- o Ensure that teachers are well informed about risks and strategies so that they can reinforce the knowledge in their classrooms.

✓ **Involve parents**
- o Communicate with parents about the tools introduced in the school sessions and encourage their involvement in using these tools at home.
- o Provide parents with workshops or informational sessions about the apps and resources available to their children**.**

CPAs should not:

– **Avoid overly complex language**
- o Do not use scientific or technical language that children may not understand; always aim for clarity and simplicity.

– **Do not avoid potentially awkard conversations about risks**
- o Do not shy away from discussing risks for fear of causing panic; promoting knowledge prevents misinformation and enables children to think critically.

– **Avoid inconsistent messages**
- o Ensure that the information communicated is consistent across all platforms - between CPAs, teachers and local authorities - in order to build trust.

- **Steer clear of invalid information**
  - o Avoid sharing information that is not verified or could mislead children and their families regarding potential hazards.

- **Do not assume teachers have all the information**
  - o Avoid assuming that teachers have sufficient knowledge of all risks; provide them with training and resources to enable them to engage their students confidently.

- **Avoid solely focusing on emergency procedures**
  - o Don't limit training to emergency response only; include broader discussions on identifying risks and strategies for building resilience.

- ✓ **Do not treat children as naïve**
  - o Children, regardless of their age, possess unique insights and perspectives that deserve respect and understanding.

- **Neglect follow-up**
  - o Avoid one-off sessions without follow-up. Ensure that learning experiences are reinforced through continued commitment and resources.

By adhering to these guidelines, CPAs can foster a well-informed, resilient future generation that understands risks and is prepared to respond appropriately. Building strong, collaborative relationships with educators and parents reinforces this effort, ensuring comprehensive risk education and awareness.

4.4 Guidelines for CPAs to communicate effectively with immigrants

One of the most significant issues that CPAs face in terms of adequate and effective communication is when it comes to refugees. The diversity of cultures and the challenges associated with speaking different native languages are perhaps seen as more important issues to consider. Following, there are given guidelines on what CPAs should and should not do when communicating with such individuals.

CPAs should:
- ✓ **Use clear and simple language**
  - o Avoid complex and technical terms that may be difficult for them to understand. Use straightforward sentences to explain concepts. Breaking down information into smaller and manageable chunks will make it easier to understand.

- ✓ **Acknowledge name variations**
  - o Be patient with names that may be unfamiliar. Politely ask how they are pronounced and show respect for their cultural identity. If needed, you should ask for phonetic spelling to avoid miscommunication.

- ✓ **Be culturally sensitive**
  - o Recognize and respect cultural differences. Get to know how different cultures interpret language, body language, and visual cues. Tailor communication styles to suit varying backgrounds and customs.

- ✓ **Utilise multilingual resources**
  - o Provide written materials and resources in the languages spoken by the immigrant group you serve.
  - o Offer translation services or have bilingual staff available to assist in communication.

- ✓ **Engage through interactive tools**
  - o Use games, quizzes, or interactive learning tools to convey important information. This can enhance understanding and retention.
  - o Promote community engagement by involving immigrants in discussions and feedback sessions to gauge understanding.

- ✓ **Facilitate peer communication**
  - o Encourage information sharing among immigrants by creating a community platform (like workshops or group meetings) where they can discuss common challenges, solutions and proactive collective learning.

- ✓ **Provide contextual information**
  - o Explain the risks and issues in relation to the specific experiences and potential disasters that individuals might be familiar with from their home countries.
  - o Use real-world examples relevant to their backgrounds to aid understanding.

- ✓ **Offer choices of communication mediums**
  - o Be flexible with communication methods. Consider using videos, audio recordings, and verbal communication in addition to printed materials.

- ✓ **Be flexible and adaptable**
  - o Don't stick to one method of communication. You should adapt and be willing to change your approach based on the needs and preferences of the audience.

CPAs should not:

- – **Avoid overly technical or legal language**
  - o Don't use technical, legal, or scientific terminology without explaining its meaning, as this may alienate or confuse your audience.

- – **Do not rely solely on visuals**
  - o Refrain from using only pictograms, colours, or images. Visuals can be interpreted differently across cultures and may not convey the intended message.

- **Steer clear of assumptions**
  - o Avoid making assumptions about immigrants' prior knowledge of the national language or systems. Each immigrant's background is unique.

- **Don't generalise cultural norms**
  - o Avoid assuming all individuals from a particular country or culture will respond the same way; treat individuals as unique, with their own experiences.

- **Do not use complex hierarchies**
  - o Avoid presenting communication in a manner that requires advanced organizational skills or cultural norms unfamiliar to immigrants.

- **Refrain from neglecting privacy concerns**
  - o Do not assume that all immigrants are comfortable sharing personal information. You should respect confidentiality and promote safety in communications.

By following these guidelines, CPAs can enhance their communication with immigrants, fostering understanding and cooperation while respecting cultural and linguistic diversity. Effective communication not only aids in conveying important information but also builds trust and relationships within the immigrant community.

4.5 Guidelines for Citizens to enhance their preparedness

The actions that citizens should take or not are summarized in the following guidelines.

Citizens should:
- ✓ **Stay Informed**
  - o Regularly check reliable sources for updates on potential risks and hazards in your area (e.g., local government websites and official news channels).
  - o Subscribe to alerts from local authorities or emergency services to receive timely information about crises.

- ✓ **Be aware and prepared**
  - o Invest time in learning survival skills, first aid, and emergency response techniques.
  - o Create and maintain an emergency supply kit that includes essentials such as food, water, medications, and important documents.

- ✓ **Be trained**
  - o Attend crisis management training, workshops and seminars offered by local organisations or government agencies.
  - o To improve preparedness and become familiar with emergency protocols, actively participate in community drills and simulations.

- ✓ **Engage in crisis management initiatives**
  - o Participate in community meetings focused on crisis management. Share your insights and experiences.

- o Participate in evacuation planning meetings or volunteer for crisis response teams to help keep your community safe.
- o If you belong to a vulnerable group, make sure to register with the local authorities.

✓ **Share valuable information**
- o Report any potential threats or hazards to the local authorities and share any relevant video or photographs that may help them to understand the situation.
- o Foster a community of awareness by discussing risks and preparedness strategies with neighbors and friends.
- o If you are in a vulnerable group, let CPAs know that you need special care in the event of an emergency.

✓ **Trust expert opinions**
- o Seek information and advice from experts in emergency management, public health and safety.
- o Follow updates and guidelines from recognized and credible organizations (e.g., CDC, FEMA).

✓ **Share personal experiences**
- o Share your experiences and the risk measures with the authorities so that they can serve as a basis for developing further solutions and collecting best practices.
- o Collaborate with local agencies to develop and disseminate effective risk management strategies based on shared experiences**.**

✓ **Utilise verified information channels**
- o Use official social media channels or community alert systems to receive confirmed updates directly from authorities and to ensure accuracy.

What citizens should not do:
- **Don't rely on unverified sources:**
  - o Avoid gathering information from social media platforms (e.g., Facebook, Twitter) or unverified websites that can spread misinformation.
  - o Be cautious of rumors and unconfirmed reports until verified by authoritative sources.

- **Don't act spontaneously**
  - o Avoid taking independent action during a crisis without official guidance or instructions from the authorities.
  - o Always wait for instructions from the emergency services to evacuate and take precautions.
  - o Avoid panicking and acting solely based on instincts.

- **Don't ignore risks**
  - o Avoid complacency about known risks in your environment. Take proactive steps to mitigate these risks.

- o Do not assume that someone else will manage the emergency situation for you—take personal responsibility for your safety.

- **Don't neglect preparedness**
  - o Do not wait for an emergency to occur before making preparations; make plans and collect supplies in advance.
  - o Prepare for different scenarios and avoid the mindset that crises won't affect you personally.

- **Don't overwhelm authorities**
  - o While sharing valuable information is encouraged, avoid bombarding local authorities with non-essential communication during a crisis.
  - o Use appropriate channels for reporting problems. Emergency hotlines should only be used for immediate threats.

By following these guidelines, citizens can play a vital role in their own safety and contribute positively to their communities in times of crisis.

4.6 Guidelines for Volunteers

Volunteers should:
- ✓ **Stay Informed**
  - o Read the updates from the CPAs on a regular basis and attend briefings to ensure that you are aware of the latest developments and information.

- ✓ **Ongoing and crisis management training**
  - o Participate in regular training sessions, workshops and seminars to enhance your skills and knowledge relevant to your volunteering role and to prepare yourself for emergencies effectively.

- ✓ **Trust and follow CPAs Instructions**
  - o Always comply with the instructions and guidelines provided by CPAs to ensure consistency and safety in your roles.
  - o Trust the decisions and guidance provided by the CPAs team. This trust will facilitate a more effective and harmonious working environment.

- ✓ **Share valid information**
  - o Collaborate with other non-profit organizations by sharing accurate and verified information that can assist them in their missions.

- ✓ **Local area knowledge**
  - o Learn about local issues, resources and community needs. This will enable you to better serve the community and provide relevant support.

- ✓ **Educate the community**
  - o Share your knowledge with local people, helping them to understand their rights, the resources available and how to get involved in community initiatives.

- ✓ **Familiarise with tools**

- o Become familiar with the applications and tools used by CPAs and seek training to use them effectively in your role.

✓ **Organise informational events**
  - o Plan and execute events that inform citizens about the work of CPAs and encourage community engagement and participation.

✓ **Create training materials**
  - o Develop and distribute training materials that can help other non-profit organisations improve their effectiveness and impact.

What citizens should not do:

✓ **Avoid unverified sources**
  - o Do not rely on information from unverified sources, such as social media platforms like Facebook, which can spread misinformation.

✓ **Do not act spontaneously**
  - o Refrain from taking independent action without explicit guidance from the CPAs. Always work under the direction of CPAs to ensure safety and effectiveness.

By following these guidelines, volunteers will increase their effectiveness, ensure their own and the community's safety, and work with CPAs and other organisations to provide vital services. Your commitment and diligence are invaluable to the success of our mission.

5 THE FRAMEWORK FLOWMAP

The last piece of the training material was the development of the Framework Flowmap. The main scope of the Flowmap is to create a holist roadmap strategy, that illustrates the ways that CPAs and other stakeholders can leverage all the principles and modules of the Collaborate Framework to fulfill their objectives and address existing gaps. This exercise is not meant to be applied reverently, but CPAs need to adjust these kinds of strategies to their specific needs.

It is also crucial to recognise that the approach may vary across the three phases of risk management. Each region has unique characteristics, develops at different speeds and is shaped by different social contexts. It is therefore essential that CPAs remain agile and continually update their strategies in response to these changes.

This chapter describes the content of this strategy and the basic results of its testing in KEE#3.

5.1 The Framework Flowmap Strategy

The Framework Flowmap is designed in five steps:

- Step 1: Preparation/ desk research

- Step 2: Two–way communication
- Step 3: Confirming/informing the gaps
- Step 4: Develop/ recognize DRR relationships – Addressing the gaps
- Step 5: Build risk communication tools and strategies

Step 1 – Preparation/ desk research

UNDERSTANDING THE LOCAL CONTEXT
- Recognize the potential problems/ goals
- What are the hazards of concern?
- What are the local demographics?
- Which groups are most vulnerable?
- Which groups and organizations are key DRR stakeholders?

HELP GUIDE
🖐Use the resources related to understanding to help you as examples

FIGURE 3: FRAMEWORK FLOWMAP– STEP 1 – PREPARATION/DESK RESEARCH

The first step of the Framework Flowmap involves conducting initial preparations and thorough desk research in order to gain a comprehensive understanding of the local community dynamics. This process requires identifying potential challenges and problems, as well as establishing clear goals to effectively address them.

In addition, CPAs have to analyse the local demographics and pinpoint any vulnerable groups in their territory that may require special attention. Moreover, it is essential to identify the DRR stakeholders who should collaborate and communicate with them throughout this process.

For that purpose, the RiskPACC platform offers a variety of resources that could facilitate completing this crucial step.

Step 2 - Two-way communication

SHARING PERCEPTIONS
• How do different actors see risk?
• What do different actors expect from each other regarding action?
• What are the capabilities and constraints of different actors?

CONCEPTUAL TOOLS – CREATE A WORKSHOP
(you can use one or both exercises)
 • Risk communication exercise
 • Participatory mapping lite
❖Set your audience
❖Set the goal of the workshop

HELP GUIDE
☞Use the resources related to sharing to help you as examples

FIGURE 4: FRAMEWORK FLOWMAP– STEP 2 – TWO – WAY COMMUNICATION

In step 2, CPAs should engage in two-way communication by sharing their knowledge and experiences with their audiences to better understand individual risk perceptions. It is essential to analyse how various stakeholders perceive risk, and what they expect from one another, and to identify each actor's capabilities and constraints.

To facilitate this process, co-creation workshops can be highly effective. Exercises like the participatory mapping lite or risk communication can be very beneficial and provide useful results for this purpose.

Additionally, a help guide, with useful resources is available in the platform to support them throughout this step.

Step 3 – Confirming/ Informing the gaps

UNDERSTANDING
Analyse the workshop results
Are the gaps with the original problems?
• If yes, go to Step 4
• If not, go to Step 2, and run a different methodology

HELP GUIDE
☞Use the resources related to understanding to help you as examples

FIGURE 5: FRAMEWORK FLOWMAP– STEP 3 – CONFIRMING/INFORMING THE GAPS

Step 3 involves analysing the insights gained from the knowledge-sharing activities conducted in Step 2, primarily through workshops. Consistent evaluation of the results

of these co-creation workshops is essential to show whether the initial gaps remain and what progress has been made. If the results indicate that CPAs are moving in the right direction, then they can go to Step 4. Conversely, if the issues remain unresolved or unclear, it's crucial to revisit the knowledge-sharing process. This may involve additional workshops with different audiences or the use of different exercises and tools to increase engagement and understanding.

Implementing this step can be challenging, especially in hypothetical scenarios such as the exercise conducted in KEE #3. However, its value is most evident in real-life situations where actionable results can be observed.

Step 4 – Develop \ Recognize DRR relationships - Addressing the gaps

RELATING
- Build connections - Integrate participation into existing processes
- Set the involved actors (first responders, public and private organizations, types of groups of citizens, etc.)
- Recognize if you need a top-down or a bottom-up approach

UNDERSTANDING/SHARING/RELATING
Co-analyse the following:
- Address how different actors see risk
- Address what different actors expect regarding action
- Address different needs regarding medium, process, and format

USE THE PLATFORM QUIZ TO SELECT THE BEST TECHNICAL TOOLS
- You can choose more than one
- If you don't agree with the results of the quiz, choose another and explain why

HELP GUIDE
Use the resources related to relating to help you as examples

FIGURE 6: FRAMEWORK FLOWMAP– STEP 4 – DEVELOP/ RECOGNIZE DRR RELATIONSHIPS – ADDRESSING THE GAPS

Step 4 primarily emphasises the importance of synthesising and integrating the results from the previous stages—Understanding, Sharing, and Relating. Resources available within the platform can facilitate this process effectively.

First, CPAs should identify the connections between the involved actors, first responders, public and private organizations, communities of citizens, etc.). They have also to determine whether a top-down or bottom-up approach is most appropriate to use in their strategy, by co-analysing the following aspects:

- The diverse risk perspectives of different actors.
- The expectations different actors have for one another's actions.
- The specific needs related to mediums, processes, and formats.

Finally, utilising the platform's quiz can assist CPAs in identifying the most suitable technical tools of RiskPACC to align with their needs and objectives.

FIGURE 7: FRAMEWORK FLOWMAP– STEP 5 – BUILD RISK COMMUNICATION TOOLS AND STRATEGIES

In the final step, CPAs should consolidate their grassroots efforts to develop a tailored strategy based on the specific needs they had identified as most relevant in order to achieve efficient communication. They can use the RiskPACC technical tools identified in the previous phase or integrate them with additional platforms, as well as leverage comprehensive approaches to engage with citizens, for instance, they could consider using nudging techniques.

Additionally, employing good practices will further enhance their ability to reach their objectives. The Knowledge Repository of Good Practices integrated into the RiskPACC platform offers a diverse array of strategies. If CPAs can't find something that fits their needs, they can always utilize the repository's methodology to discover alternative more suitable practices.

Furthermore, the platform provides a rich set of resources to assist CPAs in finalizing their communication strategy.

5.2 Implementation of the Flowmap Framework

This exercise, as mentioned before, was conducted during the final session of KEE #3. Participants were divided into three groups representing the three phases of the risk management cycle: before, during and after a disaster. Utilising a hypothetical scenario, participants collaboratively implemented the exercise step by step and subsequently shared their findings with the rest of the audience.

Although the exercise was executed only within a session, the outcomes were notably positive and aligned with the overarching goals of the RiskPACC project. It highlighted several key areas: the diverse perspectives of various stakeholders, the public perception and preparedness, the misaligned expectations of all environmental actors, the vital role of community engagement, the dynamics of volunteer involvement, the significance of adopting technology and other resources for effective disaster

management, the importance of knowledge sharing among individuals, and the need for ongoing education and training. A more detailed analysis of these results can be found in D3.8.

Overall, the implementation of this type of strategy, even in the context of an exercise, is essential for facilitating bridging the RPAG between CPAs and their perspective communities.

6 CONCLUSION

The successful completion of D4.6 marks a critical milestone for the RiskPACC project, culminating in the formulation of comprehensive training materials that specifically address the diverse needs of stakeholders. Through the various testing processes derived through the Efus and Awareness workshops, the Labs of Phase I and II and the KEEs, the project has crystallized its objectives of enhancing risk communication and fostering collaboration between citizens and CPAs.

The structured approach used in the development of the training materials centred on the four fundamental modules of the RiskPACC Collaborative Framework, has effectively set the stage for improved understanding, communication, confidence building and strategic action among all participants in the risk management process. This systematic alignment has facilitated the formulation of insightful guidelines tailored to different demographic groups - ensuring inclusivity and increasing the effectiveness of communication strategies.

The structured training materials not only reflect the lessons learned, but also represent a synthesis of stakeholder insights, best practices and methodological advances derived from the project's activities. Embedding user-friendly resources directly into the RiskPACC interactive platform ensures accessibility and encourages engagement with a wide audience, laying the foundation for sustainable adoption of the methodologies introduced.

The training materials developed within this Task, not only improve risk communication but also strive to strengthen the bonds between CPAs and the communities they serve, enhancing preparedness and concluding bridging the RPAG. These foundational resources serve as a base for future further development of the training embracing different target audiences tailoring to their specific needs.

7 ANNEXES

Annex No.	Description	No. of pages	Source
1	The Framework Guidebook	36	KEMEA
2	The Framework Flowmap exercise	1	KEMEA

TABLE 3: TABLE OF ANNEXES

7.1 ANNEX 1 – The Framework Guidebook
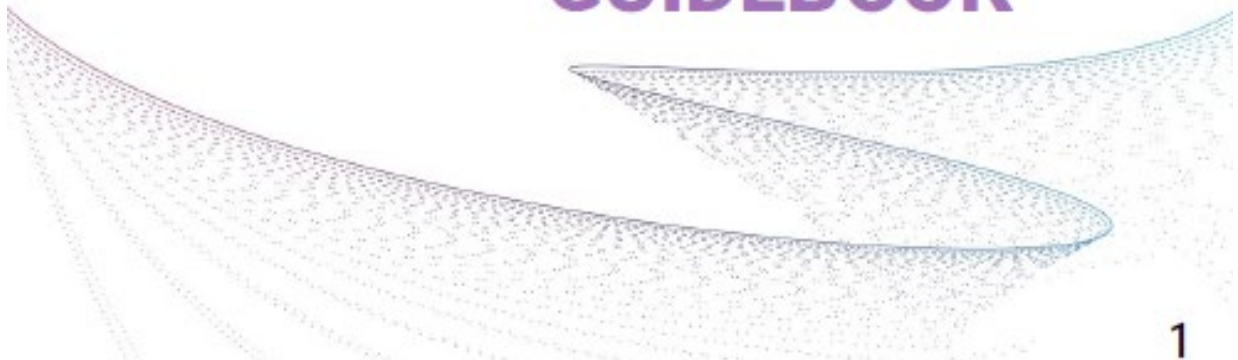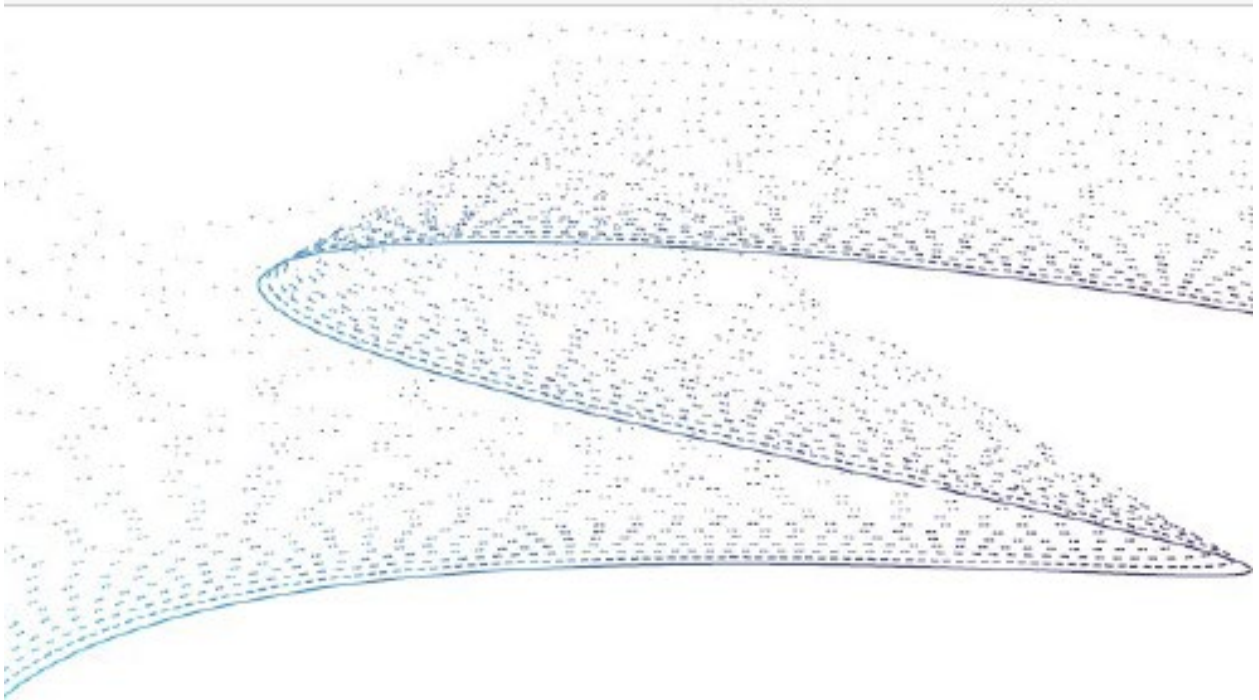
SETTING THE GOALS

Meeting the RiskPACC project...
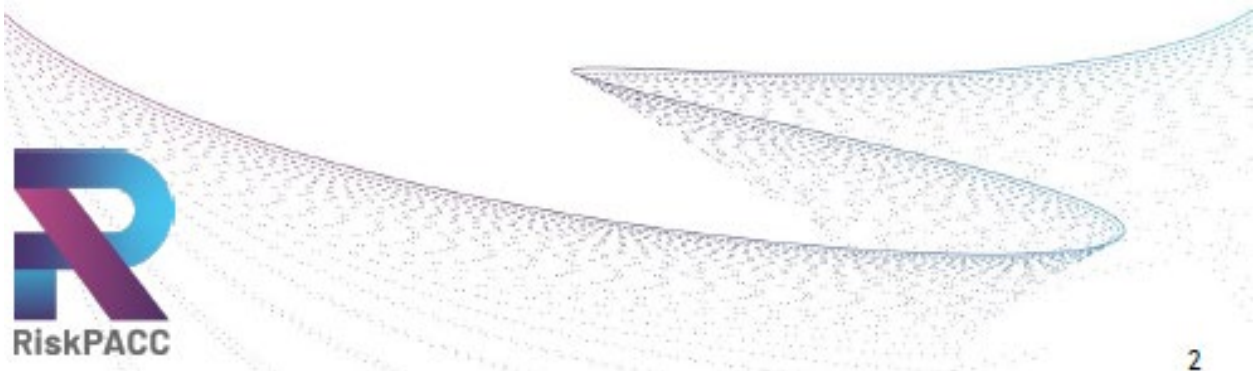
RiskPACC

2

Increasingly complex and interconnected risks globally highlight the need to enhance individual and collective disaster resilience. Awareness of risks and levels of preparedness across Europe remain low with gaps between the risk perceptions and actions of citizens, and between the risk perceptions of citizens and Civil Protection Authorities (CPAs). The RiskPACC project seeks to understand further and close this Risk Perception Action Gap (RPAG).

The "Risk Pack" of solutions includes a framework and methodology to understand and close the RPAG, a repository of international best practices and tooled solutions based on new forms of digital and community–centered data and associated training guidance.
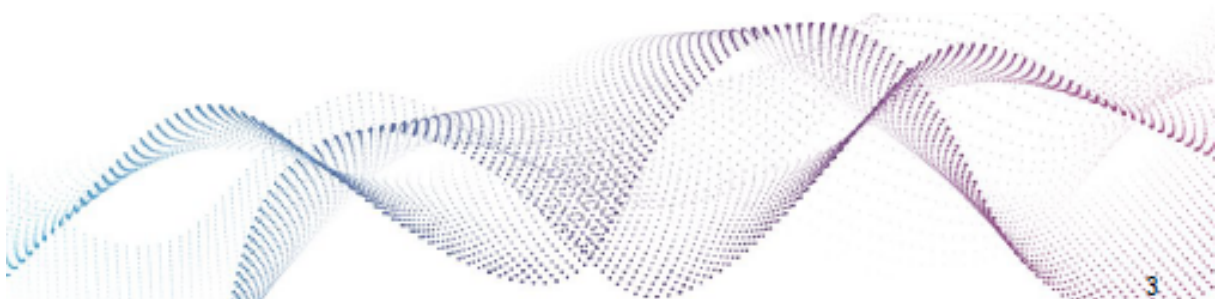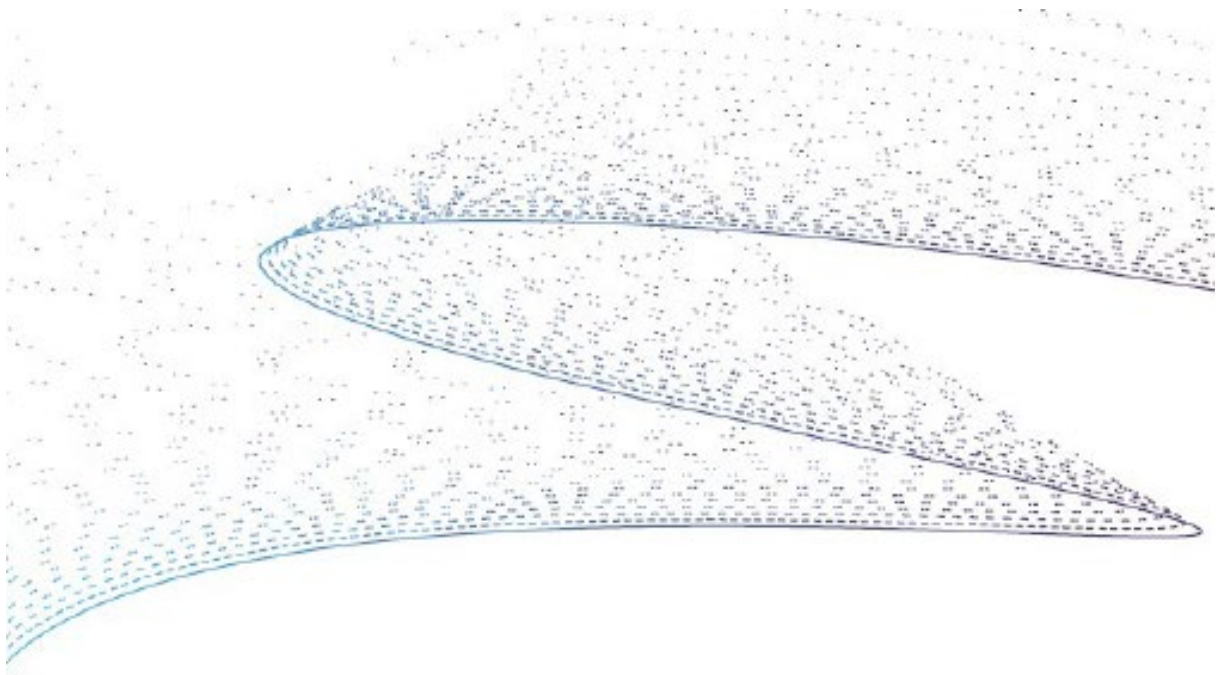
THE COLLABORATIVE FRAMEWORK

Getting deeper into the key aspects
of the Framework...

RiskPACC

4
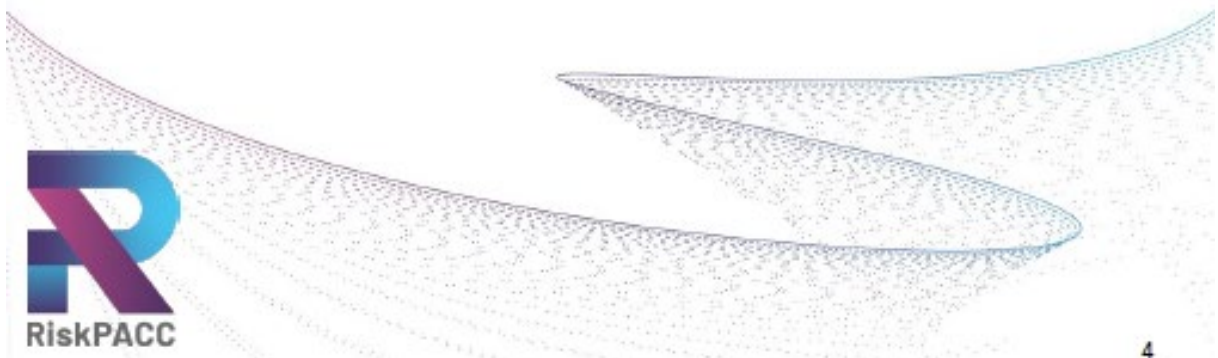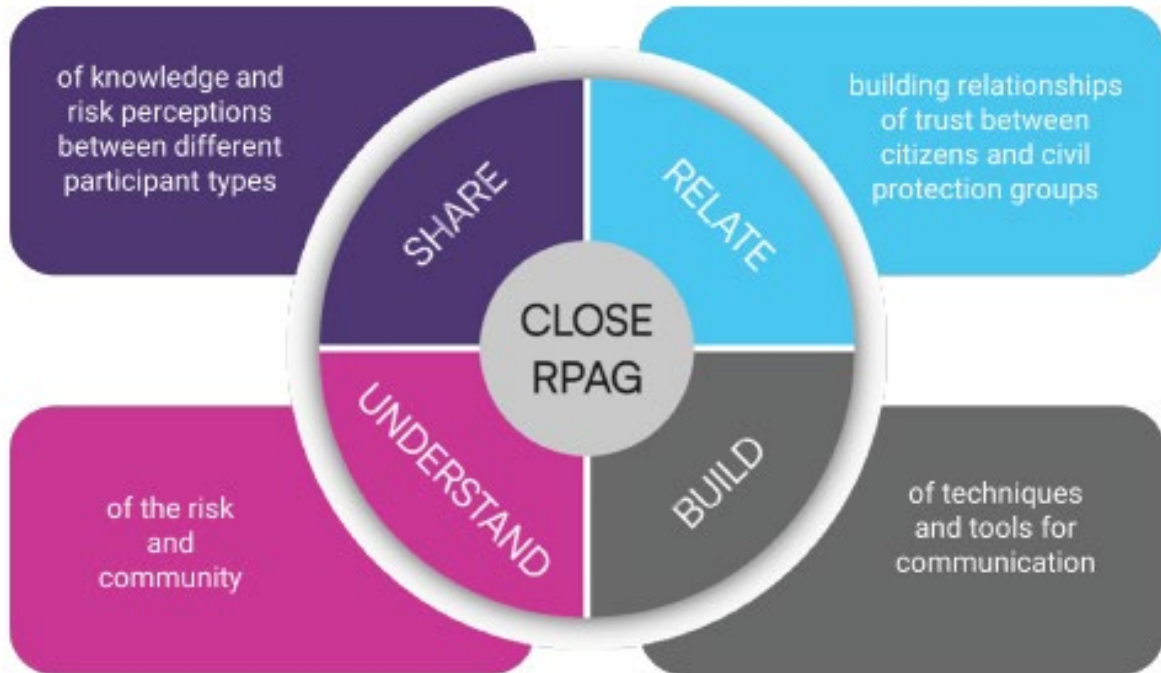
The RiskPACC Collaborative Framework is designed to help co-create strategies and tools for communicating about risks based on an ongoing two-way conversation between CPAs and citizens. It is made up of four related modules:

UNDERSTAND: jointly develop an understanding of the local risk and social contexts through dialogue

SHARE: CPAs and citizens share and discuss their risk perceptions and expectations regarding risk management

RELATE: build risk reduction relationships between CPAs and citizens

BUILD: jointly build risk communication tools and strategies – based on 1, 2 and 3

UNDERSTANDING
the Risk Information Context

Focuses on the hazards in a given location

INDICATORS:

➢ **HAZARD EVENTS**: Experience/ no experience of hazard events affects risk perception (likelihood, susceptibility, willingness to act).

➢ **POLICY, LEGISLATION & GOVERNANCE:** The availability of risk reduction policy, legislation and governance structures and processes.

➢ **ENVIRONMENT**: The physical/ biological contexts shape opportunities and limitations for action on risk; The presence of physical mitigation influences risk attitudes.

KEY ELEMENTS

▶ The presence of hazard events is linked with the experience around them and furthermore affects risk perception.

▶ Existing of risk reduction policies, legislation and governance structures and processes can act as the basis for organized action to plan for, mitigate, reduce and respond to risk.

▶ Awareness of the relevant policies, laws and forms of risk management in the location of interest can lead to the improvement of the Understanding of the risk context.

▶ Understanding what actions can the risk and emergency managers take and which are the rights and responsibilities of citizens, can lead to the improvement of the Understanding of the risk context.

▶ Actions taken depend upon the resource availability in the given location and the political will to support professional and community-based activities and duties. Understanding the policy and legislation context will help in understanding why certain actions may or may not be possible.

▶ The locational environment is hugely influential in which hazards occur and can determine some of the outcomes of any hazard event.

▶ Geographic location is a vital factor in understanding how any population anticipates, prepares for, responds to and recovers from hazardous events.

▶ The presence of structural defenses can influence people's perception of risk (that a structure can remove a risk e.g. flood structures can eliminate the flood risk of an area).

6

UNDERSTANDING
the Social Political (People) Context

Focuses on the diversity of people at risk in the location and the importance of understanding the opportunities and challenges that such diversity brings

INDICATORS:

- **SOCIAL-DEMOGRAPHICS (SOCIAL GROUPS):** Gender, age, race/ethnicity, (dis)ability, social class, etc. influence vulnerability and capacity.
- **COMMUNITY CHANGE & DISTURBANCE:** In-migration, out-migration, community conflict, economic turbulence, etc. influence vulnerability and willingness to act.
- **AVAILABLE RESOURCES:** Levels of human, social, economic, assets influence knowledge, ability, willingness to act

KEY ELEMENTS

- Gender can be seen as a standalone matter of concern or applied intersectionally alongside other social parameters such as age.

- CPAs should consider the role of gender in everything they do.

- Children even if they belong to vulnerable groups, can play a significant active role in disaster risk reduction.

- Traditional infrastructure and emergency procedures are designed for people without disabilities, marginalizing people with disabilities and without taking into consideration the percent of the population facing physical, sensory, cognitive, or mental health issues (World Health Organization, 2011). Disability-inclusive DRR policies, strategies, and action plans have to be developed in line with the Sendai Framework.

- Risk perception is more related to sociopolitical factors and perceived vulnerability than biological factors and social group identity.

- The degree of change of stable populations of locations, the disturbance or stability in a locality can influence levels of community cooperation and conditions under which CPAs for example have to work.

- Increasing population growth rates or changes or changes in population structure can exacerbate risk and threat in a multi-hazard environment.

- Newly arrived residents and tourists in a location will lack or struggle to benefit from the kinds of social ties and the resources that typically develop.

- The social characteristics are strongly connected with reduced access to resources, greater exclusion and increased vulnerability.

- The role of access to resources or assets is a critical factor in shaping communities' abilities to plan for and respond to the impacts of hazards and climate change. Access to resources is a key factor in relative levels of vulnerability and the empowerment of marginal groups.

- Human and social factors may influence the uptake and use of technologies and social media in hazard and disaster contexts.

7

SHARING
Risk Perceptions and Actions

CITIZENS' AND CPAS RISK PERCEPTIONS
- Is there variability in how citizens characterize the risk (fatalism, blame, agency, etc)?
- How do CPAs characterize and measure the risk?

CITIZENS' AND CPAS' ACTIONS
- Are there organized risk management groups?
- What actions have been taken (plans, outreach, etc)?

KEY ELEMENTS

▶ Citizens lack the right information, or the right information in the right form in order for them to act.

▶ Development of a collaborative governance model is needed to achieve a granular level of CPA-Citizen knowledge exchange.

▶ In areas with a history or recent occurrence of a hazardous event, are often local groups that are developed to support citizens and act as a more organized and formalised link to CPAs, who may be unknown to the general citizen. Over time such local groups can attain expert status as they often include interested local professionals.

▶ Volunteer participatory mapping and creation of action groups for disasters have been highlighted as crucial in identifying key issues facing their community and interfacing with the various authorities concerned with different hazards. These groups can act as a useful bridge between CPAs and the general citizen with limited knowledge of emergency planning. The common

ground of communication between CPAs-citizens is imperative and has been the basis for the design of the RiskPACC Co-creation Labs.

▶ Understanding how all groups come into collaboration is important to identify any unspoken misunderstandings or latent conflicts.

▶ The role of trust is a key variable in positive relationship-building between CPAs and citizens and a significant factor that strongly influences risk perception.

▶ Social capital and the availability of networks are considered an important aspect of community resilience.

▶ Reservoirs of social capital can be a significant indicator of successful or non-successful vulnerability of a community in disasters.

8

RELATING
Risk Reduction Relationships

CITIZEN-CPA AND CPA-CITIZEN
- How do citizens regard CPAs? How do CPAs regard citizens?
- Is there a history of collaboration or conflict?
- What is the level of trust?

CITIZEN-CITIZEN
- Presence/ absence of social capital
- Is there a history of collaboration or conflict?
- What is the level of trust?

CPA-CPA
- Is there a history of collaboration/ cooperation or conflict/ difference?
- What is the level of trust?

NON-CITIZENS
- E.g migrants, victims of trafficking, temporary visitors, etc
- Are they visible/ hard to reach/ at greater risk?
- What is the level of trust?

KEY ELEMENTS

► Coordination failures, absences of coordination or linking with other service providers such as social services or community development that do happen could provide more evidence about the social context in which the CPAs are operating.

► Not permanently present citizens are less likely to receive or understand warnings and the chances of being more vulnerable is more increased due to a mix of social, cultural, and legal factors. This target vulnerable target group be affected by:
  - o   limited language proficiency;
  - o   limited knowledge of their destination's hazards, laws, institutions and markets;
  - o   limited social networks;
  - o   a lack of trust in authorities;
  - o   restrictions on mobility; and
  - o   discrimination, hostility and xenophobia (Guadagno et al 2017: 9).

9

BUILDING
Risk Communication Approaches

ATTITUDES AND VALUES
- What are citizens' expectations of CPAs?
- What are CPAs' expectations of citizens?

FORM AND PROCESS
- Technological/ non technological?
- Centralised or decentralised?
- Interpersonal communication?

MEDIUM
- Social Media?
- Face To Face?
- Provision of Materials?
- Provision of appropriate tools?

RECEPTION & EFFECT
- Have messages been received as intended?
- Evaluation of Outcomes?
- Are the solutions adequate for CPAs?
- Are the tools adequate for Citizens?

KEY ELEMENTS

► A successful two-way communication includes learning about the perceptions, attitudes, needs and expectations of both CPAs and citizen groups.

► Knowing what citizens expect of CPAs and vice versa provides the starting point in opening up two-way communication and sets the scene for then exploring what works in the form, the medium and the evaluation

10
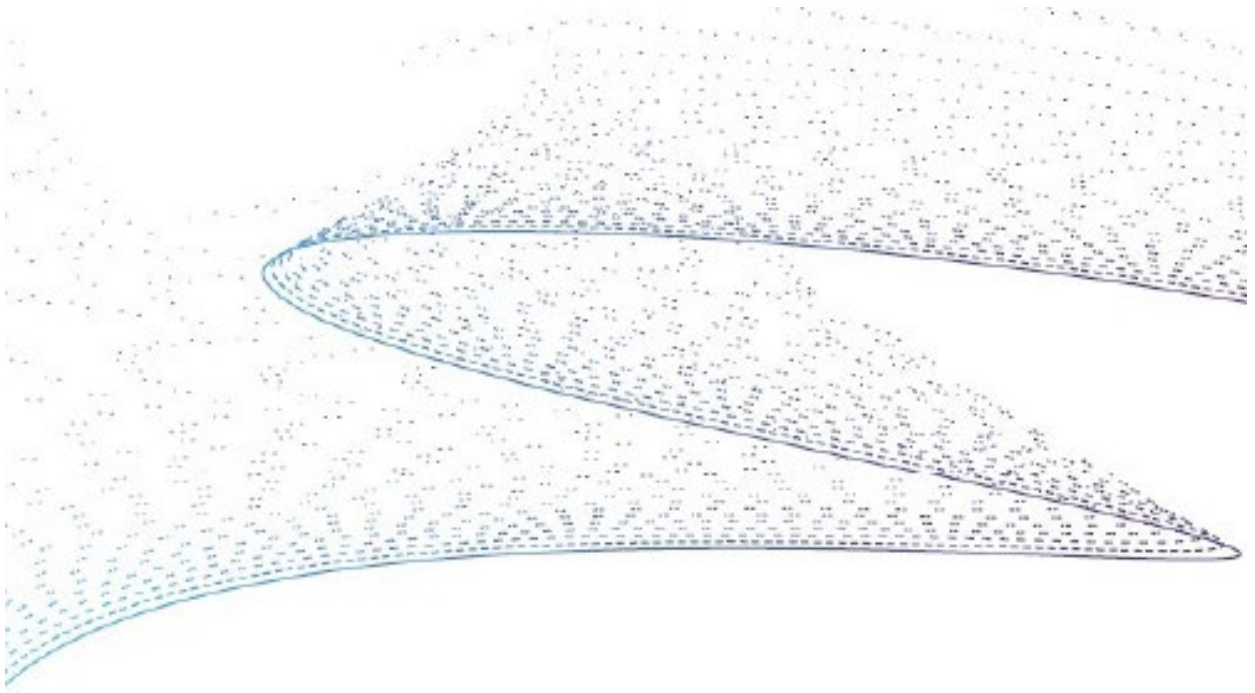
THE REPOSITORY OF GOOD PRACTICES

Meet the Repository Methodology...

RiskPACC

11
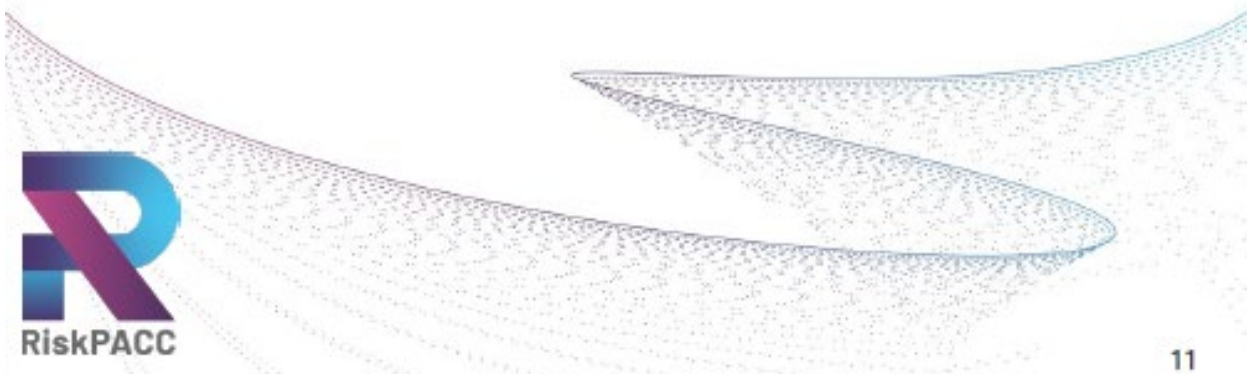
What is the Repository of Good Practices?

The Repository of Good Practices is a collection for different purposes and contexts that could be used by Civil Protection Authorities (CPAs) and/ or citizens to close what the project of RiskPACC understands and defines as the Risk Perception-Action Gap (RPAG).

The practices stem from resilience in Disaster risk management, international and European crisis management mechanisms and good practices that are implemented on different hazards.

The Repository is a platform where users can share good practices, accompanied by relevant information related to the specific practices, experiences, and especially an analysis of the assessment criteria.
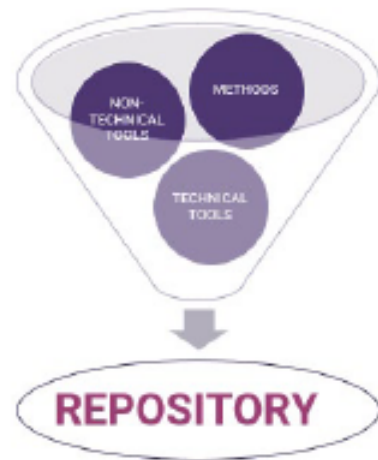
What assesses a practice as good?
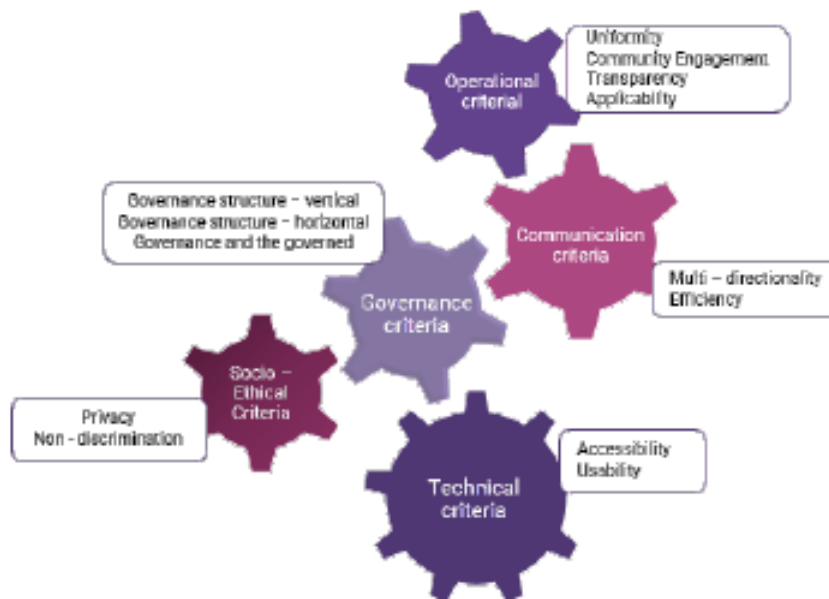
The criteria to assess the quality of a practice in the Repository, are based on the gaps identified within the extent research of the project, such as gaps between theory and practice; governance; operational and implementation; and data and technology related. It is based on these criteria that it is decided if a practice is 'good', and they will help a user of the Repository to evaluate if the practice is suitable for an envisaged purpose.

To whom is addressed?

It can be an essential feature for users, such as Civil Protection Authorities, local and regional authorities, volunteers, and citizens to share their expertise and knowledge with the wider community.

The Repository of good practices can be found online on the RiskPACC platform.
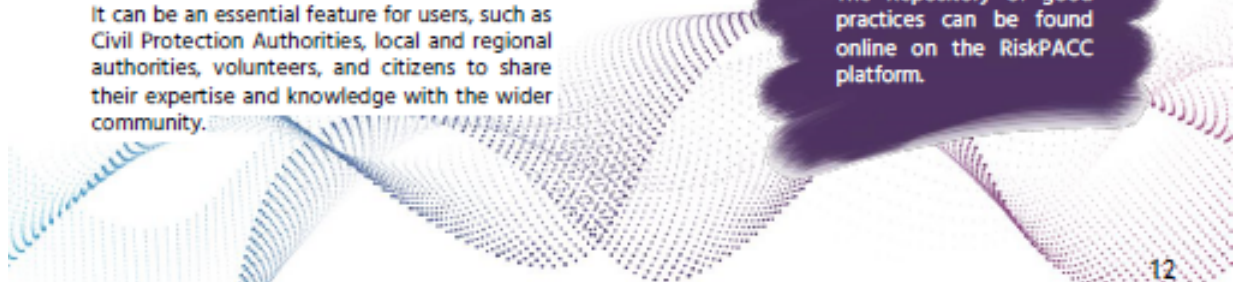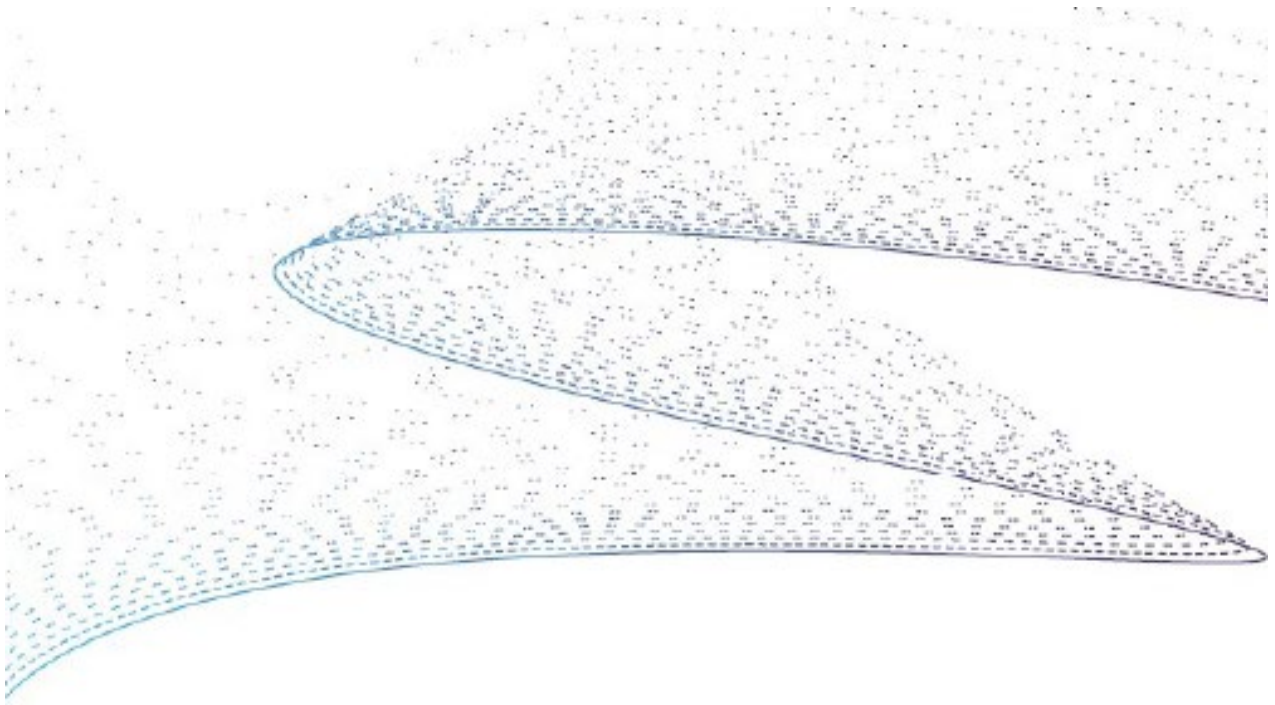
THE TECHNOLOGICAL TOOLS

Achieve communication with the RiskPACC
technological tools...

RiskPACC

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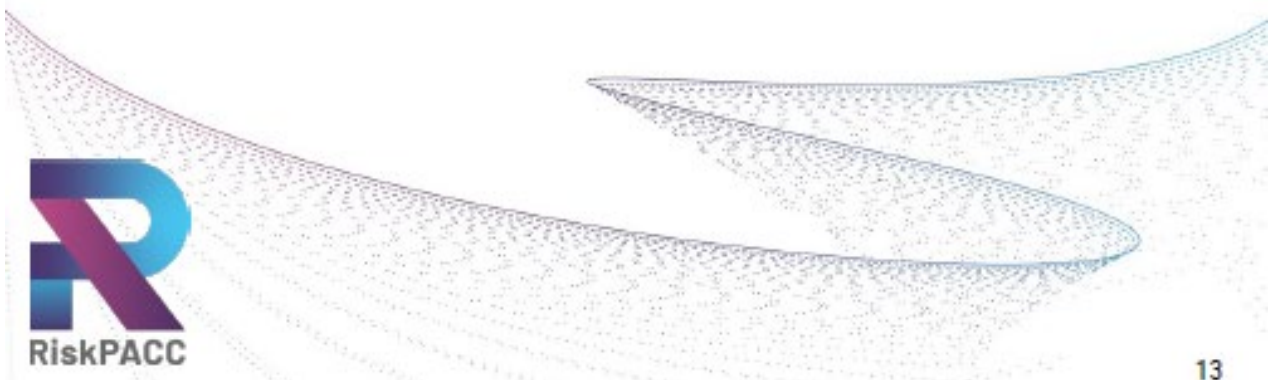
AEOLIAN APP

The Aeolian AR Mobile App is a groundbreaking, powerful tool designed to establish bidirectional communication between citizens, volunteers, and Civil Protection Authorities (CPAs) during all phases of the disaster management cycle. This immersive app provides timely information, warnings, and media exchange to enhance prevention, preparedness, and response to natural and anthropogenic hazards. Seamlessly blending real environments with virtual objects through augmented reality (AR) technology, the app offers an accessible and user-friendly format. With features like hazard maps, reports, training modules, notifications, and emergency calls, the Aeolian AR Mobile App empowers users to actively contribute to inclusive disaster management, knowledge exchange, and increased disaster preparedness.

- ➢ Improving citizens' and volunteers' comprehension of risk context through Disaster Trainings, AR campaigns, and access to relevant mate.
- ➢ Stages for a common risk communication amongst CPAs.

- ➢ The chat facilitates a direct communication between CPAs and citizens/ volunteers.

- ➢ The tools has been tailored for specific needs.
- ➢ Adoption of a common language between CPAs and citizens/volunteers, fostering equality and co-design of shared solutions.

- ➢ Workshops and co-design supported a collaborative development of risk communication approaches.

- ➢ Facilitates improved communication between citizens, volunteers and CPAs.

- ➢ Shares data about imminent or recent events.

HERMES APP

HERMES is a social network-like platform designed to revolutionise communication during emergencies. In this video, discover how HERMES addresses the challenges of inadequate communication between various entities and citizens during critical situations. Explore its features, including the ability for Civil Protection Authorities to create posts with warnings and weather alerts, while citizens can share their firsthand experiences and insights. With HERMES, information sharing becomes faster, more efficient, and centralised in a common space, ensuring timely updates and relevant documentation for disaster preparedness and response. Witness the seamless collaboration between citizens, volunteers, Civil Protection Authorities, and first responders as they connect, exchange information, and foster a stronger sense of community resilience. Join the HERMES network and be part of the next generation of emergency communication.

PUBLIC SONAR

Through Artificial Intelligence (AI), PublicSonar supports you in gaining quick and easy real-time insights from an infinite number of messages. Through the user-friendly interface, you can:

- Perform situational search: the time-saving wizard allows you to stay in control of your searches at any time. Among other things, the wizard offers you AI-powered word and location suggestions to avoid missing messages when people express themselves with diverse speech.
- Set up real-time alerts: through personalized alerts via text or e-mail, you are immediately informed when a situation escalates.
- 360-degree imaging: with Machine Learning and Natural Language Processing, you can instantly recognise signals and analyse situations. In addition, the crowd analysis feature not only gives you insight into what is happening, but Deep Learning also reveals how a situation is being experienced.
- Data enrichment: add real-time data from a wide range of social media channels and other (semi-) open sources to your investigation and analysis. Furthermore, it is possible to enrich your data with Named – Entity Recognition (NER). This involves training algorithms to detect specific situational information, such as location and characteristics of a perpetrator, from texts.
- Collaborate efficiently: through dashboards and reports, you can easily collaborate and share insights with colleagues and other stakeholders.
- Work compliantly: built-in controls and feedback make it easy to comply with laws and regulations.

➤ Identifinition of hazards early in their occurrence by scanning social media.
➤ Identifinition of resources that people might need.

➤ Ability of indefication questions directed towards CPAs, citizens and non-citizens on social media.

➤ Ability to inform changes to CPA risk communications by identifying which media to use based on citizens' preferences and by analysing their responses and emotions relating to risk communications via sentiment analysis.

publicsonar

15

MappingDamage Tool

MappingDamage is a Volunteered Geographic Information (VGI) platform designed to bridge the communication gap between citizens and Civil Protection Authorities (CPAs) in the aftermath of disasters. In this video, discover how MappingDamage leverages the power of volunteers as data collection agents to gather crucial information about damages and relay it to the appropriate authorities. Witness how this innovative tool enables CPAs to conduct needs assessments, allocate resources, make informed decisions, and implement targeted interventions for post-disaster recovery and reconstruction. With unique functionalities like surveys, result visualization, and a post function for discussions, MappingDamage fosters collaboration and empowers both CPAs and volunteers. Don't miss this opportunity to witness the transformative potential of Volunteered Geographic Information in disaster response.

- Allow pre-disaster monitoring of the state of available resources.
- Allows citizens to be active participants in post-disaster damage mapping.
- Facilitates top-down and bottom – up information flow between CPAs and citizens.

Thermal Comfort Tracker

- Allows CPAs to perform controlled experiments to define citizens perceptions.
- Allows CPAs to perform controlled experiments to define citizens perceptions.

ThermalComfort Tracker is a Volunteered Geographic Information (VGI) tool designed to address the lack of data infrastructure and monitoring mechanisms in understanding heatwave situations for municipalities. In this captivating video, learn how ThermalComfort Tracker empowers Civil Protection Authorities (CPAs) to gain valuable insights into citizens' perceptions of thermal comfort during heatwaves. Witness the integration of citizens' responses to thermal comfort indicator questions with environmental data collected from thermal sensors placed across the city

16
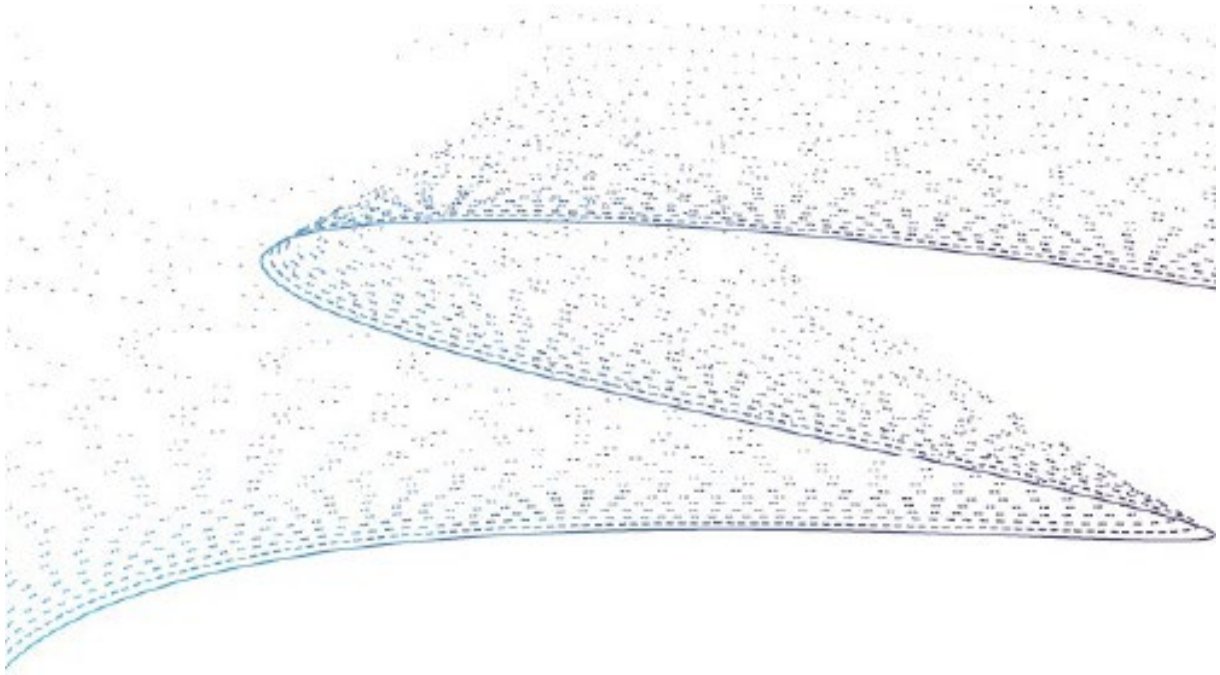
THE CONCEPTUAL TOOLS

Foster dialogue with the conceptual tools...

RiskPACC

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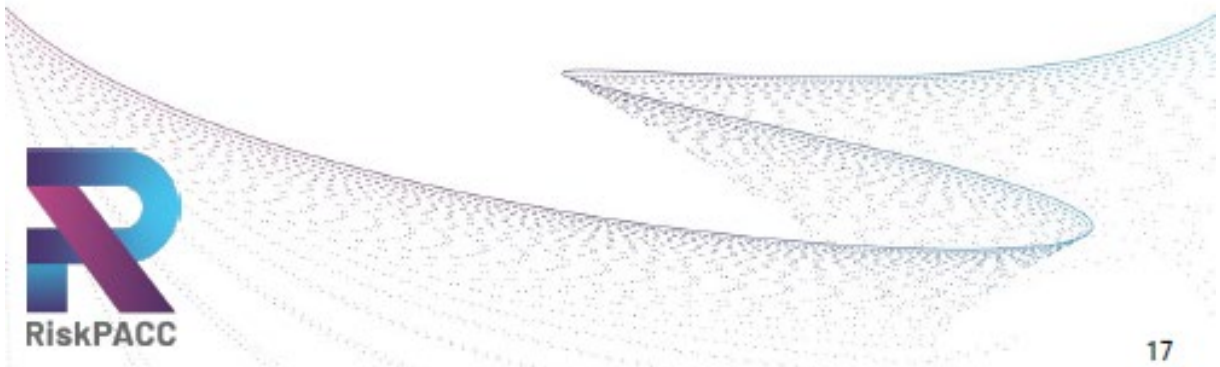
Co-creation methodology

Co-creation is a methodology adapted from rather practical, instead of scientific environments. The co-creation approach employed in RiskPACC serves a two-fold objective:

1. A horizontal approach for the whole project and
2. A vertical approach for structuring the workshops.

The participatory mapping exercise is designed to focus on the understanding, sharing, and relating aspects of the RiskPACC framework, with a specific emphasis on fostering dialogue and collaboration among CPAs and local citizens. Unlike traditional mapping projects, which focus primarily on the identification and visualisation of risks and hazards, this exercise prioritizes the engagement and co-production of knowledge among participants.

The participatory mapping exercise aims to empower communities through active engagement and collaborative knowledge production, ultimately enhancing their capacity to understand and respond to different risks and opportunities in their environment.

Participatory mapping exercise

The risk communication exercise we designed aimed to provide a flexible solution for case study partners to address the Building module of the RiskPACC framework within their own specific context.

The aim of the risk communication exercise is:

➢ To address a need by CPAs to communicate to citizens and/or volunteers a particular risk that they have identified.
➢ To open up a structured space for dialogue and sharing of risk perceptions between CPAs and citizens/volunteers on the meanings and measurements of this particular risk.
➢ To identify the best forms of risk communication to help citizens and/or volunteers take informed and appropriate risk reduction actions.
➢ To meet the needs of co-design and build relationships of trust through working together on a defined activity.

Risk communication exercise

Nudging is a concept in behavioural sciences such as psychology or communication science. A nudge is an instrument to influence people's behaviour without forbidding an option or forcing a change. It can be used to persuade a person to behave in a socially desirable way. We consider nudging to be integrated in a conceptual storyboard User Story (see below) to be a good fit to give a technological solution an additional aspect.

Nudging

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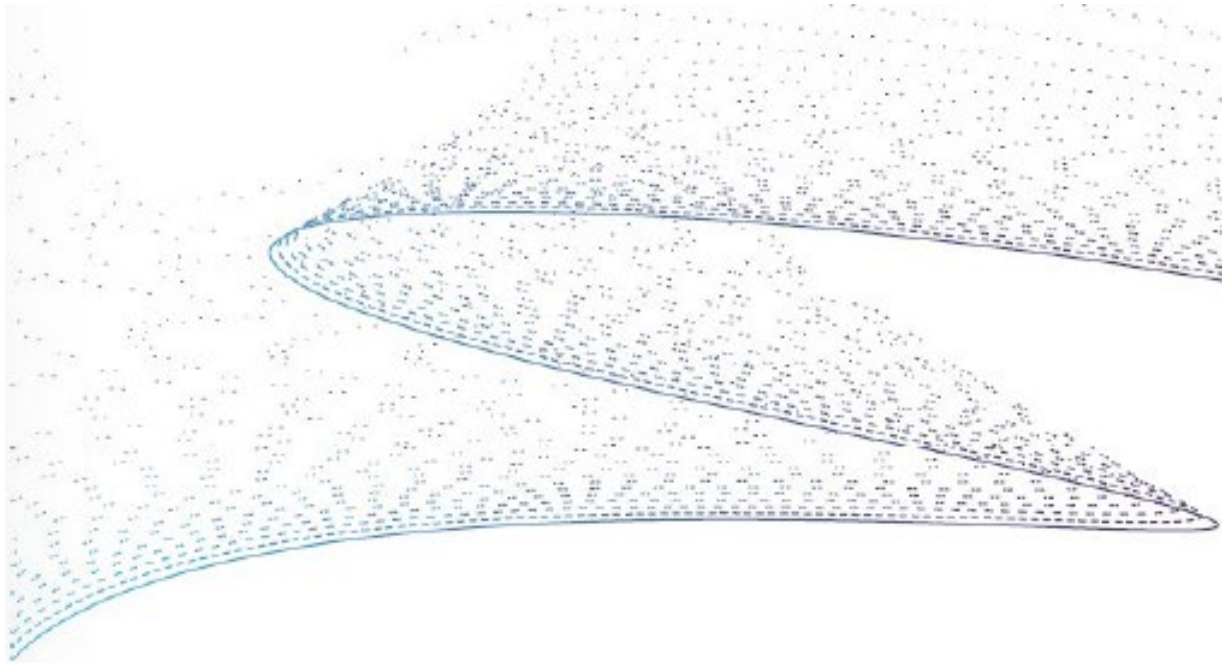
THE ROADMAP OF THE COMMUNICATION BETWEEN CPAS AND CITIZENS

Learn how to communicate with your community...

RiskPACC

19
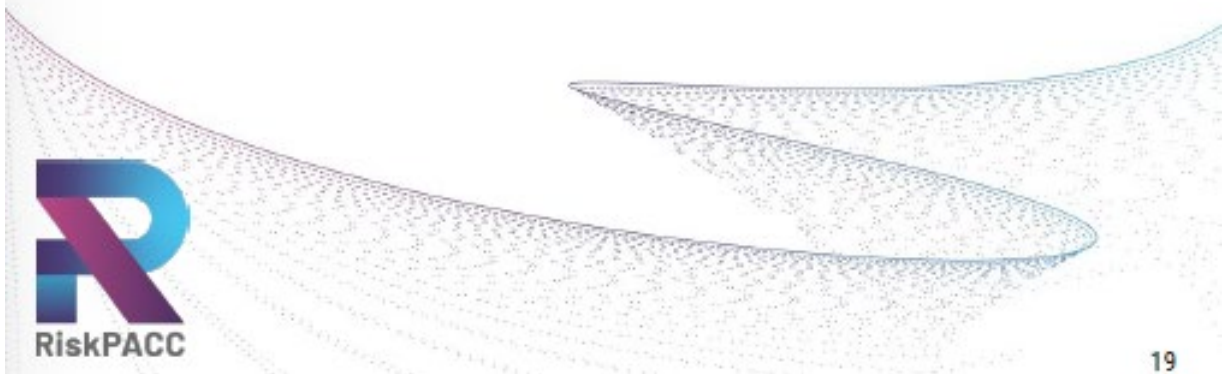
CPAs
Roles & Needs

- It is vital to have access to accurate information.

- In a case of a disaster, stakeholders must be notified immediately without any delay.

- They always have to keep a consistent relationship with the highest administrative levels.

- Local technical/human resources must be mobilized quickly and efficiently to achieve the lowest possible number of human losses, protect welfare and cultural heritage, and control and evaluate the damages.

- In case In cases where the resources and related capacities of the municipalities are insufficient, assistance should reach the highest administrative levels (prefecture, region) immediately.

- The higher administrative levels (county, region) must have a clear picture of the human/technical resources of individual municipalities to be able to assess and transfer resources from one area to another.

- Externally qualified supporting human resources, together with voluntary organisations should also be informed as soon as possible to reach the disaster site

- Action Memorandums should be drawn up by all agencies involved in natural disaster management, in order to describe who is doing what, why they are doing it, how they are doing it (by what means) and when they are doing it.

- Each Agency has to cooperate with other stakeholders (public and private sector) by concluding the so-called memorandums of cooperation.

- Cooperation with neighbouring municipalities, material suppliers outside the municipality's area of responsibility, voluntary groups from the wider region or even from all over the country, etc. is encouraged.

- The existence of interoperability is an important element of successful disaster management and a further catalyst for strengthening disaster risk management policies.

20

Volunteers Roles

- ▶ Volunteers can serve as a channel of communication between CPAs and citizens.

- ▶ There are three main types of volunteers:

  - Civil Protection Volunteers: The natural person – a member of a voluntary civil protection organization, who joins the Civil Protection team and provides, in cooperation with local authorities and other operational services, an unpaid and non-profit service for the benefit of society as a whole.

  - Volunteer Firefighters: They are citizens who are willing to offer voluntary (unpaid) work in the field of Firefighting - Rescue exclusively and only through the Fire Service. Volunteering firefighting is an institution that is a significant component in the firefighting strategy followed by many European countries (FIRE PRODUCT SEARCH).

  - Community volunteers: Citizens who offer their services and assistance with no profit.

- ▶ Voluntary Civil Protection Organisations support government agencies in all phases of the disaster cycle, through Operational and Supporting roles.

- ▶ Responsibilities of the Civil Protection Volunteers are according to the training and certifications of each volunteer.

- ▶ Voluntary Organizations and other cooperating organizations and agencies are activated and involved operationally on the initiative of the locally competent Regional Civil Protection Coordinator or the Commander of the Civil Protection

- ▶ Coordinating Organization, in the appropriate operational organization per incident, according to the existing and declared operational capabilities in proportion to the emerging operational needs.

- ▶ Volunteer Fire Services are immediately activated by the Fire Service Operational Coordination Centre.

- ▶ Community volunteers consist mostly of citizens willing to provide community service without profit. Particularly, in the recovery phase of a disaster or even in the response phase groups of voluntary organizations are mobilized providing social assistance to the first responders who operate. Citizens are more likely to engage with a volunteer organization when they are appropriately trained. Volunteer training ensures higher performance and long-term commitment and involvement.

21

Citizens & vulnerable groups Aspects to take in advance

- Citizens must have access to basic services.

- Disaster preparedness, delivery of emergency assistance and recovery support should be ensured for all citizens.

- Adults may experience challenges that come with advanced age, such as hearing or vision problems or cognitive impairment, which may make it difficult to access, understand, and respond to emergency instructions.

- The elderly not only face mobility problems but also chronic health conditions. In addition, sometimes they live on their own, without any family or friends nearby to support and take care of them.

- Vulnerable people have to know a network of people they can reach out for assistance when necessary.

- Need for gender-sensitive disaster risk reduction policies and inclusion of women in disaster management.

- Migrants, asylum seekers and refugees are most likely to face difficulties in accessing adequate services, resources and opportunities for reasons such as language barriers, social and geographical confinement, and a high level of mistrust from members and institutions of the host countries.

- Engagement of migrants in disaster management and civil protection authorities either as employees or as volunteers, will lead to cancel their reluctance in participating in civil affairs and they will also become more proficient in the spoken language, learn new skills and increase their interactions with locals assisting them to be integrated in the host society.

- Measures should be taken to reduce migrants' distrust and fear of the host country.

CHILDREN - Age-development characteristics

Age 5-7

- ▶ Particularly good at sorting and categorizing.

- ▶ Difficulty recognizing that objects have more than one characteristic such as color, shape, size, or material.

- ▶ Perception of the flow of time and temporal concepts (before-after, today-yesterday-tomorrow), as well as the temporal sequence of events.

- ▶ Short-term and long-term memory develops to a satisfactory degree

- ▶ Memorize auditory and visual stimuli, e.g. a series of pictures of familiar objects

- ▶ Ability to recognize ten colors.

- ▶ Progressively improvement of the focus attention improves.

- ▶ Decrease of impulsivity and increased mobility in earlier years.

- ▶ Continuous improvement of motor skills and interest in testing their physical strength.

- ▶ By learning how their body works, they gain the confidence and skills needed to enjoy sports activities and participate in individual or team sports. This makes their game more cooperative.

- ▶ Interested in singing, dancing, and dramatic play.

- ▶ Development of fine mobility. With appropriate visual-motor coordination, they can and do copy simple shapes, write their name and use scissors satisfactorily.

- ▶ At this age, pleurization is established (almost complete).

Age 8-12

- ▶ Significant increase in vocabulary: the number of words used expands, as a result of greater social interaction and entry into formal education.

- ▶ Fantasy predominates. In this phase, children are attracted to activities related to imagination (reading imaginary stories, games, drama), but can differentiate them from the real world.

- ▶ Starting point of the of development of logical thinking and the ability to perform basic mathematical operations

23

CHILDREN - Age-development characteristics

Age 13-18

- Adolescents deal with changes that occur at the biological, cognitive, emotional, and social levels.

- Tendency to oppose parents and question them and any "authority", as well as to reject the social situation and living conditions as unfair and unacceptable are characteristic of this age and can be fruitful reflections when they lead to new theoretical life models, in thoughts about social, political and human rights issues

- Tendency to independence from family and significant adults.

- Simultaneous need to feel that he/she belongs to a group of (usually) peers determines to a significant extent his/her behavior and choices. In fact, the teenager risks submissively following a group, adopting its communication code, and behaviours and committing to roles suggested by others. This need of the teenager is so intense that even behaviour patterns are adopted that are contrary to the value system he had until then. The same adolescents who question parents may idealise and follow others with whom they have no emotional ties, but who promises them an ultimate meaning in life, inspire strength, and manipulate them.

- Adolescents, in the context of cognitive egocentrism, tend to believe that their experiences are unrepeatable,and unique.

- The feeling of loneliness and despair is also observed. This increases the possibility of them becoming targets of malicious individuals or criminal groups that aim to manipulate them.

- A further increase in vocabulary is observed. Words acquire a fuller and more abstract content and metaphorical concepts and phrases (proverbs) are now understood.

- Strong emotionality of speech as well as introverted monologue and dialogue is observed. Language of adolescent culture is used

- Increase of cognitive egocentrism.

- Use of complex defense mechanisms (asceticism, intellectualism), daydreaming, acquisition of Ego identity

24

Guidelines for CPAs to improve themselves and their communication with citizens

Stay Informed and Engage in Continuous Learning

DO:

- ✓ **Participate in professional development:** Attend workshops, conferences, and training sessions regularly to keep abreast of changes in legislation, regulations and best practices.
- ✓ **Research changes in legislation:** Keep up to date with new plans and regulations from the central government that affect your area of work.
- ✓ **Review training resources:** Use available resources to learn about new strategies for engaging with communities and understanding citizens' perceptions.

DON'T:

- ✗ **Neglect professional development:** Avoid skipping the responsibility of continuous learning. In an evolving field, it is vital to keep up to date.
- ✗ **Isolate yourself professionally:** Don't ignore networking opportunities that can help you gain valuable insights from other professionals.

Community Vulnerability and Risk Assessment

DO:

- ✓ **Create an inventory of local vulnerable groups:** Identify groups that are particularly vulnerable in your territory.
- ✓ **Engage with vulnerable populations:** Use direct dialogue and surveys to find out about their risk perceptions and expectations.
- ✓ **Develop targeted communication strategies:** Develop approaches that take into account the vulnerabilities and needs of identified groups in your community.
- ✓ **Utilise family and trusted persons:** Involve family members or trusted people (such as general practitioners) to help pass on information. This can create a sense of comfort and trust in the message being delivered.

DON'T:

- ✗ **Assume that there is a homogeneous risk perception for everyone:** Avoid generalizing risks for the entire population. You should understand the diverse needs of different groups.
- ✗ **Ignore feedback:** Don't dismiss or overlook what community members have to say about their perceptions and experiences.
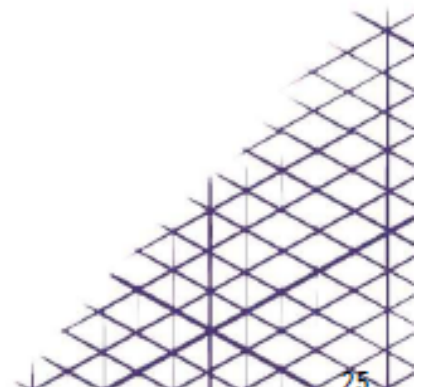
Guidelines for CPAs to improve themselves and their communication with citizens

Information Collection and Public Engagement

DO:

- ✓ **Organize surveys and community activities:** Use methods such as participatory mapping and questionnaires to collect data about citizens' risk perceptions.
- ✓ **Share clear, accessible, and engaging information:** Use multiple communication channels such as print, social media and community meetings to share information effectively.
- ✓ **Communicate in the individual's mother tongue:** When dealing with elderly and vulnerable groups, always prioritise their primary language. Use translation services if necessary to ensure comprehension and to respect for cultural perspectives.

DON'T:

- ✗ **Overlook non-digital populations:** Don't rely solely on digital communication methods; ensure that information reaches everyone, including those who are not digitally connected
- ✗ **Neglect clarity and simplicity:** Do not complicate communications. Use simple language and clear instructions.

Build Trust and Collaboration

DO:

- ✓ **Engage with local organisations:** Collaborate with schools, community organisations, and other local CPAs to foster trust and cooperation.
- ✓ **Incorporate community feedback into planning:** Actively involve citizens in planning emergency response activities and risk communication strategies.
- ✓ **Establish continuous dialogue:** Maintain regular communication with community members to adapt strategies as situations evolve. Create an open dialogue where citizens, especially the elderly, and people with low self-esteem feel comfortable asking questions. Reassure them that no question is too simple or insignificant

DON'T:

- ✗ **Work in isolation:** Avoid acting independently of other CPAs or organisations. You should foster cooperation and coordination.
- ✗ **Dismiss citizen input:** Don't ignore or underestimate the input and feedback you receive from the community on your risk management policies.

26

Guidelines for CPAs to improve themselves and their communication with citizens

Risk Communication

DO:

- ✓ **Utilise diverse types of communication:** Provide updates through multiple channels. Ensure availability in formats accessible to people with disabilities. Especially for the elderly and people who are hard to reach, share information using diverse formats—flyers, brochures, and newsletters. Ensure these materials are visually clear, with simple language and large print.
- ✓ **Ensure continuous improvement of apps:** Regularly update applications to keep them up-to-date and user-friendly.
- ✓ **Set clear expectations:** Communicate actionable steps that citizens can take before, during and after emergencies to improve preparedness.

DON'T:

- x **Engage in one-way communication:** Avoid communications that do not encourage feedback or interaction from the audience.
- x **Use complex applications:** Don't implement applications that are not user-friendly or too complicated for the average user.

Training and Education

DO:

- ✓ **Develop tailored training materials:** Create targeted training materials that are suitable for different age groups (children, older people) and for people with disabilities.
- ✓ **Organize training and educational initiatives:** Organise conferences and workshops to raise awareness and educate different community groups about risks and preparedness.

DON'T:

- x **Overlook aftercare:** Avoid failing to provide citizens with follow-up information and support after a crisis.
- x **Deliver ineffective training:** Don't provide training that lacks clarity or is not tailored to the audience's needs.

Guidelines for CPAs to communicate effectively with children

DO:

✓ **Implement gamification**
- Incorporate toys, games and interactive technology, such as apps and computers, to make the topic that you need to communicate relatable and engaging for children.
- Use participatory mapping exercises using visual aids such as LEGO, Playmobil, or other tangible items to help children understand concepts more clearly.

✓ **Develop age-appropriate materials**
- Create educational materials that are appropriate for the children's age group, with illustrations and interactive elements to keep them engaged.
- Provide resources like videos, quizzes, and questionnaires to reinforce learning in a fun and interactive way.

✓ **Encourage open communication**
- Foster an environment where children feel safe to ask questions about risks and hazards. Recognise their curiosity as a valuable opportunity for education.
- Be transparent and honest while discussing risks, providing age-appropriate information that empowers rather than instills fear.

✓ **Promote pre-emptive risk education**
- Educate children about potential risks and preventative measures early on, equipping them with actionable knowledge for when risks manifest.
- Integrate lessons on resilience and risk awareness into the compulsory school curriculum, beyond basic emergency procedures.

✓ **Collaborate with educators**
- Work closely with teachers to create joint educational experiences such as workshops, visits to local services (fire, police) and hands-on demonstrations.
- Ensure that teachers are well informed about risks and strategies so that they can reinforce the knowledge in their classrooms.

✓ **Involve parents**
- Communicate with parents about the tools introduced in the school sessions and encourage their involvement in using these tools at home.
- Provide parents with workshops or informational sessions about the apps and resources available to their children.

DON'T:

✗ **Avoid overly complex language**
- Do not use scientific or technical language that children may not understand; always aim for clarity and simplicity.

✗ **Do not avoid conversations about risks**
- Do not shy away from discussing risks for fear of causing panic; promoting knowledge prevents misinformation and enables children to think critically.

✗ **Avoid inconsistent messages**
- Ensure that the information communicated is consistent across all platforms - between CPAs, teachers and local authorities - in order to build trust.

✗ **Steer clear of invalid information**
- Avoid sharing information that is not verified or could mislead children and their families regarding potential hazards.

✗ **Do not assume teachers have all the information**
- Avoid assuming that teachers have sufficient knowledge of all risks; provide them with training and resources to enable them to engage their students confidently.

✗ **Avoid solely focusing on emergency procedures**
- Don't limit training to emergency response only; include broader discussions on identifying risks and strategies for building resilience.

✗ **Do not treat children as naïve**
- Children, regardless of their age, possess unique insights and perspectives that deserve respect and understanding.

✗ **Neglecting follow-up**
- Avoid one-off sessions without follow-up. Ensure that learning experiences are reinforced through continued commitment and resources.

28

Guidelines for CPAs to communicate effectively with the elderly

DO:

✓ **Utilise family and trusted persons**
- Involve family members or trusted individuals (like general practitioners or community leaders) to help in delivering the information. This can create a sense of comfort and trust when the messages are delivered.

✓ **Communicate and provide information in various formats and methods**
- Share information using a variety of different formats, such as leaflets, brochures and newsletters. Ensure that these materials are visually clear, with simple language and large print.
- Use a variety of communication channels and methods, such as face-to-face meetings, community events, home visits and mailings. This allows for personal interactions that can help ensure understanding.

✓ **Communicate in the individual's mother tongue**
- Always prioritise the native language of the elderly. If necessary, use translation services to ensure understanding and respect cultural perspectives.

✓ **Maintain simplicity of information**
- Ensure that the information provided is simple and free of technical and scientific notions. Use bullet points, illustrations and clear headings to improve understanding and readiness.

✓ **Encourage questions**
- Create an open dialogue where older people feel comfortable asking questions. Reassure them that no question is too simple or insignificant and that everyone matters.

✓ **Collaborate with retirement and nursing homes**
- Collaborate with local retirement and nursing homes to develop, disseminate, and implement hazard-related risk and emergency plans tailored to the specific needs of their residents.

✓ **Follow up**
- Follow up after the initial communication to ensure that elderly and their families fully understand the information and processes outlined.

DON'T:

✗ **Avoid overreliance on technology and avoid using only online tools**
- Do not depend exclusively on technological solutions, digital websites, or apps, as many elderly may not have access to or be familiar with digital tools. Ensure that any technological solutions are incredibly user-friendly and be accessed also offline.

✗ **Do not assume familiarity with common tools**
- Do not assume that elderly individuals are familiar with apps, websites, or even conventional communication technology. Always prefer methods they are more likely to understand.

✗ **Avoid information overload**
- Do not overload with excessive information. Use key points and actionable guidelines for clear understanding.

✗ **Refrain from technical language**
- Avoid using complex or technical language, as this can lead to confusion and misunderstandings.

✗ **Do not rush communication**
- Allow enough time for questions and discussion. Rushing communication can make older people feel undervalued and lead to a lack of understanding.

✗ **Avoid dismissing concerns**
- Never underestimate or ignore the concerns of older individuals. Their experiences and worries should be taken seriously and addressed respectfully.

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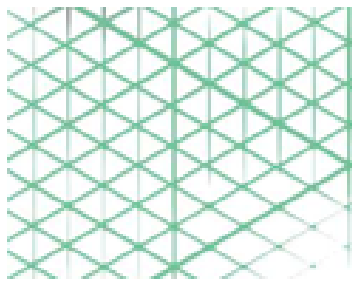
Guidelines for CPAs to communicate effectively with immigrants

DO:

✓ **Use clear and simple language**
- Avoid complex and technical terms that may be difficult for them to understand. Use straightforward sentences to explain concepts. Breaking down information into smaller and manageable chunks will make it easier to understand.

✓ **Acknowledge name variations**
- Be patient with names that may be unfamiliar. Politely ask how they are pronounced and show respect for their cultural identity. If needed, you should ask for phonetic spelling to avoid miscommunication.

✓ **Be culturally sensitive**
- Recognize and respect cultural differences. Get to know how different cultures interpret language, body language, and visual cues. Tailor communication styles to suit varying backgrounds and customs.

✓ **Utilise multilingual resources**
- Provide written materials and resources in the languages spoken by the immigrant group you serve.
- Offer translation services or have bilingual staff available to assist in communication.

✓ **Engage through interactive tools**
- Use games, quizzes, or interactive learning tools to convey important information. This can enhance understanding and retention.
- Promote community engagement by involving immigrants in discussions and feedback sessions to gauge understanding.

✓ **Facilitate peer communication**
- Encourage information sharing among immigrants by creating a community platform (like workshops or group meetings) where they can discuss common challenges, solutions and proactive collective learning.

✓ **Provide contextual information**
- Explain the risks and issues in relation to the specific experiences and potential disasters that individuals might be familiar with from their home countries.
- Use real-world examples relevant to their backgrounds to aid understanding.

✓ **Offer choices of communication mediums**
- Be flexible with communication methods. Consider using videos, audio recordings, and verbal communication in addition to printed materials.

✓ **Be flexible and adaptable**
- Don't stick to one method of communication. You should adapt and be willing to change your approach based on the needs and preferences of the audience.

DON'T:

x **Avoid overly technical or legal language**
- Don't use technical, legal, or scientific terminology without explaining its meaning, as this may alienate or confuse your audience.

x **Do not rely solely on visuals**
- Refrain from using only pictograms, colours, or images. Visuals can be interpreted differently across cultures and may not convey the intended message.

x **Steer clear of assumptions**
- Avoid making assumptions about immigrants' prior knowledge of the national language or systems. Each immigrant's background is unique.

x **Don't generalise cultural norms**
- Avoid assuming all individuals from a particular country or culture will respond the same way; treat individuals as unique, with their own experiences.

x **Do not use complex hierarchies**
- Avoid presenting communication in a manner that requires advanced organizational skills or cultural norms unfamiliar to immigrants.

x **Refrain from neglecting privacy concerns**
- Do not assume that all immigrants are comfortable sharing personal information. You should respect confidentiality and promote safety in communications.

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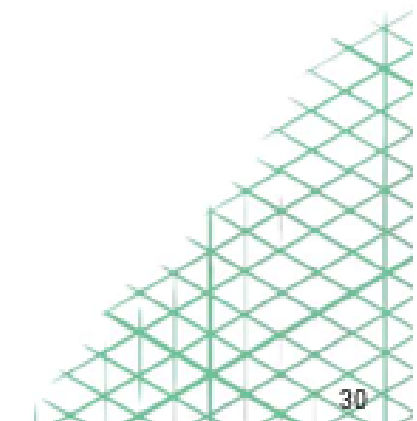
Guidelines for Citizens to enhance their preparedness

DO:

✓ **Stay Informed**
- Regularly check reliable sources for updates on potential risks and hazards in your area (e.g., local government websites and official news channels).
- Subscribe to alerts from local authorities or emergency services to receive timely information about crises

✓ **Be aware and prepared**
- Invest time in learning survival skills, first aid, and emergency response techniques.
- Create and maintain an emergency supply kit that includes essentials such as food, water, medications, and important documents.

✓ **Be trained**
- Attend crisis management training, workshops and seminars offered by local organisations or government agencies.
- To improve preparedness and become familiar with emergency protocols, actively participate in community drills and simulations

✓ **Engage in crisis management initiatives**
- Participate in community meetings focused on crisis management. Share your insights and experiences.
- Participate in evacuation planning meetings or volunteer for crisis response teams to help keep your community safe.
- If you belong to a vulnerable group, make sure to register with the local authorities.

✓ **Share valuable information**
- Report any potential threats or hazards to the local authorities and share any relevant video or photographs that may help them to understand the situation.
- Foster a community of awareness by discussing risks and preparedness strategies with neighbors and friends.
- If you are in a vulnerable group, let CPAs know that you need special care in the event of an emergency.

✓ **Trust expert opinions**
- Seek information and advice from experts in emergency management, public health and safety.
- Follow updates and guidelines from recognized and credible organizations (e.g., CDC, FEMA).

✓ **Share personal experiences**
- Share your experiences and the risk measures with the authorities so that they can serve as a basis for developing further solutions and collecting best practices.
- Collaborate with local agencies to develop and disseminate effective risk management strategies based on shared experiences

✓ **Utilise verified information channels**
- Use official social media channels or community alert systems to receive confirmed updates directly from authorities and to ensure accuracy.

DON'T

✗ **Don't rely on unverified sources**
- Avoid gathering information from social media platforms (e.g., Facebook, Twitter) or unverified websites that can spread misinformation.
- Be cautious of rumors and unconfirmed reports until verified by authoritative sources.

✗ **Don't act spontaneously**
- Avoid taking independent action during a crisis without official guidance or instructions from the authorities.
- Always wait for instructions from the emergency services to evacuate and take precautions.
- Avoid panicking and acting solely based on instincts.

✗ **Don't ignore risks**
- Avoid complacency about known risks in your environment. Take proactive steps to mitigate these risks.
- Do not assume that someone else will manage the emergency situation for you—take personal responsibility for your safety.

✗ **Don't neglect preparedness**
- Do not wait for an emergency to occur before making preparations; make plans and collect supplies in advance.
- Prepare for different scenarios and avoid the mindset that crises won't affect you personally.

✗ **Don't overwhelm authorities**
- While sharing valuable information is encouraged, avoid bombarding local authorities with non-essential communication during a crisis.
- Use appropriate channels for reporting problems. Emergency hotlines should only be used for immediate threats.

31
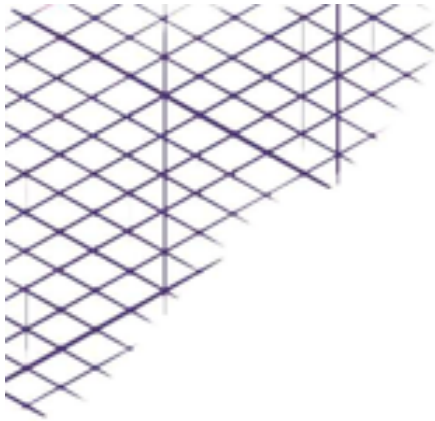
Guidelines for Volunteers

DO:

✓ **Stay Informed**
- Read the updates from the CPAs on a regular basis and attend briefings to ensure that you are aware of the latest developments and information.

✓ **Ongoing and crisis management training**
- Participate in regular training sessions, workshops and seminars to enhance your skills and knowledge relevant to your volunteering role and to prepare yourself for emergencies effectively.

✓ **Trust and follow CPAs Instructions**
- Always comply with the instructions and guidelines provided by CPAs to ensure consistency and safety in your roles.
- Trust the decisions and guidance provided by the CPAs team. This trust will facilitate a more effective and harmonious working environment.

✓ **Share valid information**
- Collaborate with other non-profit organizations by sharing accurate and verified information that can assist them in their missions.

✓ **Local area knowledge**
- Learn about local issues, resources and community needs. This will enable you to better serve the community and provide relevant support.

✓ **Educate the community**
- Share your knowledge with local people, helping them to understand their rights, the resources available and how to get involved in community initiatives.

✓ **Familiarise with tools**
- Become familiar with the applications and tools used by CPAs and seek training to use them effectively in your role.

✓ **Organise informational events**
- Plan and execute events that inform citizens about the work of CPAs and encourage community engagement and participation.

✓ **Create training materials**
- Develop and distribute training materials that can help other non-profit organisations improve their effectiveness and impact.

DON'T:

✗ **Avoid unverified sources**
- Do not rely on information from unverified sources, such as social media platforms like Facebook, which can spread misinformation.

✗ **Don't act spontaneously**
- Refrain from taking independent action without explicit guidance from the CPAs. Always work under the direction of CPAs to ensure safety and effectiveness.
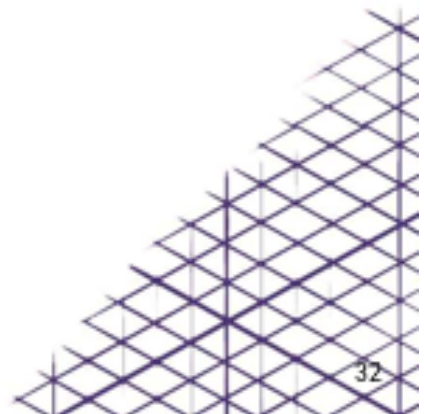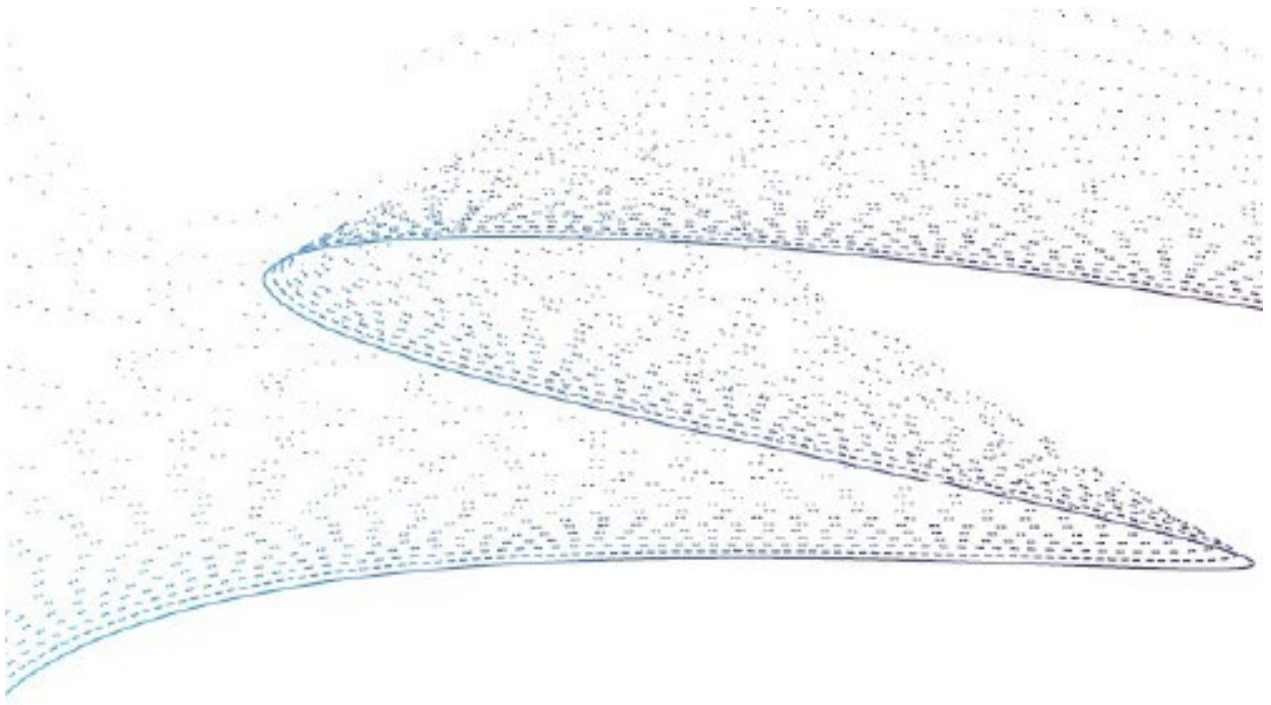
THE FRAMEWORK FLOWMAP

A Collaborative Framework strategy to reach effective risk communication

This exercise explores the collaboration of tools within and outside RiskPACC

RiskPACC

33

STEP 1
PREPARATION/ DESK RESEARCH

Guidelines

UNDERSTANDING THE LOCAL CONTEXT
- Recognize the potential problems/ goals
- What are the hazards of concern?
- What are the local demographics?
- Which groups are most vulnerable?
- Which groups and organizations are key DRR stakeholders?

HELP GUIDE
- Use the resources related to understanding to help you as examples

- Identify the potential problems that you may face during a disaster.
- Establish clear goals.
- Analyse the local demographics.
- Pinpoint any vulnerable groups in your territory.
- Identify the DRR stakeholders involved, whom you should collaborate and communicate with throughout the process.

STEP 2
TWO-WAY COMMUNICATION

SHARING PERCEPTIONS
- How do different actors see risk?
- What do different actors expect from each other regarding action?
- What are the capabilities and constraints of different actors?

CONCEPTUAL TOOLS – CREATE A WORKSHOP
(you can use one or both exercises)
- Risk communication exercise
- Participatory mapping lite
- Set your audience
- Set the goal of the workshop

HELP GUIDE
- Use the resources related to sharing to help you as examples

- Analyse how various stakeholders perceive risk and what they expect from one another.
- Identify each actor's capabilities and constraints.
- Share knowledge and experiences.
- Implementing a co-creation workshop could be very useful.
- Risk communication and participatory mapping exercises can facilitate in creation of dialogue between and your audience.

STEP 3
CONFIRMING/ INFORMING THE GAPS

UNDERSTANDING
Analyse the workshop results
Are the gaps with the original problems?
- If yes, go to Step 4
- If not, go to Step 2, and run a different methodology

HELP GUIDE
- Use the resources related to understanding to help you as examples

- Analyse the results from the knowledge-sharing activities.
- Assess if the gaps identified initially are the same and what progress has been made.
- If the results indicate that you are in the right direction, continue to next step 4.
- If the results remain unclear or the gaps are different from the initial ones, revisit step 2. This may require implementing additional workshops with different audiences or the use of different exercises and tools.

34

STEP 4
DEVELOP \ RECOGNIZE DRR RELATIONSHIPS - ADDRESSING THE GAPS

Guidelines

RELATING
- Build connections - Integrate participation into existing processes
- Set the involved actors (first responders, public and private organizations, types of groups of citizens, etc.)
- Recognize if you need a top-down or a bottom-up approach

UNDERSTANDING/SHARING/RELATING
Co-analyse the following:
- Address how different actors see risk
- Address what different actors expect regarding action
- Address different needs regarding medium, process, and format

USE THE PLATFORM QUIZ TO SELECT THE BEST TECHNICAL TOOLS
- You can choose more than one
- If you don't agree with the results of the quiz, choose another and explain why

HELP GUIDE
- Use the resources related to relating to help you as examples

- Identify the connections the involved actors.
- Determine if you need a top-down or a bottom-up approach.
- Co-analyse the diverse risk perspectives of different actors.
- Co-analyse the expectations different actors have for one another's actions.
- Co-analyse specific needs related to mediums, processes, and formats.
- Run the quiz that is available in the RiskPACC platform to help you identify which tool or tools are the most suitable to align with their needs and objectives.

STEP 5
BUILD RISK COMMUNICATION TOOLS AND STRATEGIES

BUILDING
→ **CREATE YOUR STRATEGY**
- Use the technical tools that fit your needs.
- Engage people with the app. How?
- Use the Repository
  - If there is not a good practice exist in the repository, use the methodology needed to search or create a new one.
- Use the nudging methodology to engage people with your strategy/ tools/ ideas

HELP GUIDE
- Use the resources related to building to help you as examples

- You can start creating your strategy by using one or more of the RiskPACC technical tools or any other tool that you think fits your need identified in the previous step.
- You can integrate this or these tools with additional platforms or tools.
- Leverage comprehensive approaches to engage with citizens for instance, you could consider using nudging techniques.
- Use the Repository of Good Practices.
- If you can find a practice that fits your needs, utilise the repository methodology to discover alternative suitable solutions.
- Combine the above and enhance your communication strategy!

35

Interested?

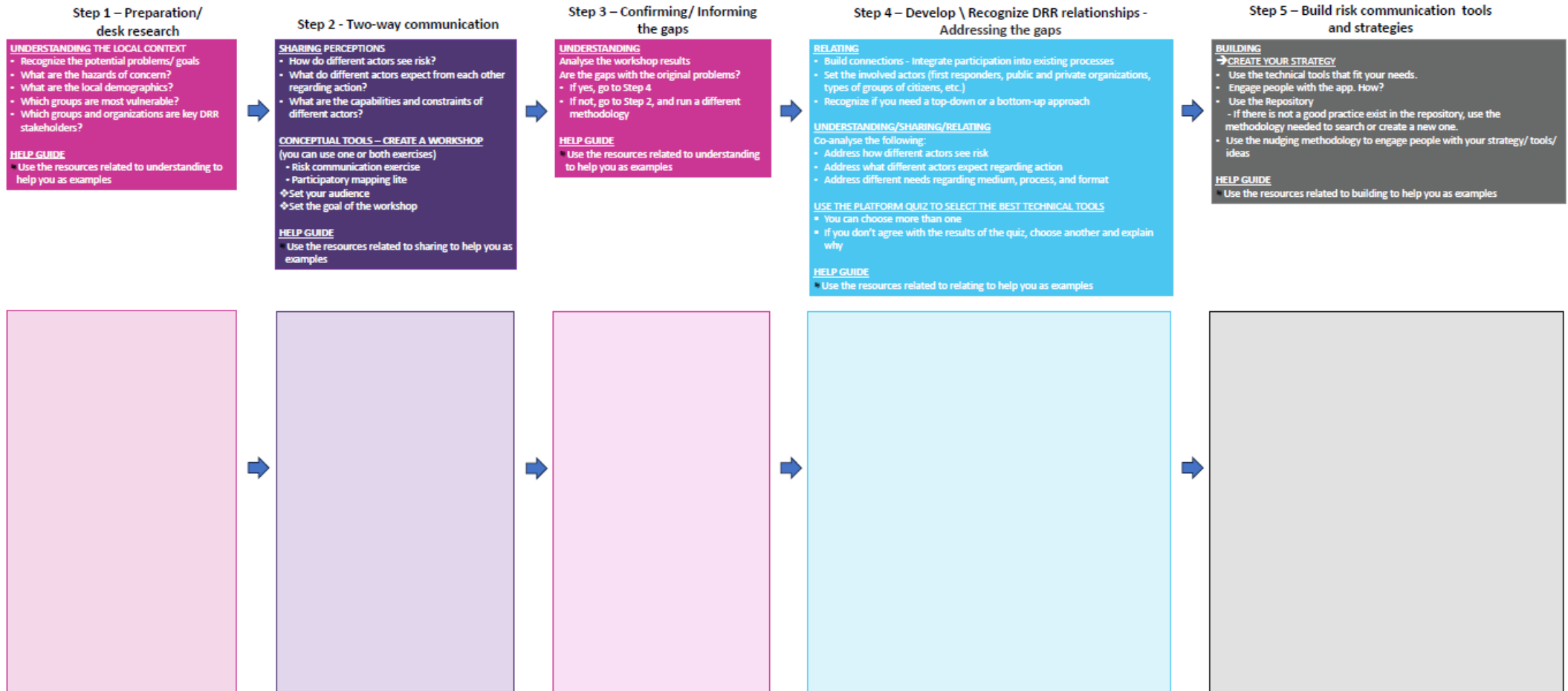If you are interested in learning more about the RiskPACC project or what to dive deeper into our results, please make sure to check out our website (https://www.riskpacc.eu/) or social media channels!

Funded by the European Union

7.2 ANNEX 2 – The Flowmap

THE RiskPACC FRAMEWORK- PRACTICAL IMPLEMENTATION FLOWMAP

Step 1 – Preparation/ desk research

UNDERSTANDING THE LOCAL CONTEXT
- Recognize the potential problems/ goals
- What are the hazards of concern?
- What are the local demographics?
- Which groups are most vulnerable?
- Which groups and organizations are key DRR stakeholders?

HELP GUIDE
- Use the resources related to understanding to help you as examples

Step 2 - Two-way communication

SHARING PERCEPTIONS
- How do different actors see risk?
- What do different actors expect from each other regarding action?
- What are the capabilities and constraints of different actors?

CONCEPTUAL TOOLS – CREATE A WORKSHOP
(you can use one or both exercises)
- Risk communication exercise
- Participatory mapping lite
❖ Set your audience
❖ Set the goal of the workshop

HELP GUIDE
- Use the resources related to sharing to help you as examples

Step 3 – Confirming/ Informing the gaps

UNDERSTANDING
Analyse the workshop results
Are the gaps with the original problems?
- If yes, go to Step 4
- If not, go to Step 2, and run a different methodology

HELP GUIDE
- Use the resources related to understanding to help you as examples

Step 4 – Develop \ Recognize DRR relationships - Addressing the gaps

RELATING
- Build connections - Integrate participation into existing processes
- Set the involved actors (first responders, public and private organizations, types of groups of citizens, etc.)
- Recognize if you need a top-down or a bottom-up approach

UNDERSTANDING/SHARING/RELATING
Co-analyse the following:
- Address how different actors see risk
- Address what different actors expect regarding action
- Address different needs regarding medium, process, and format

USE THE PLATFORM QUIZ TO SELECT THE BEST TECHNICAL TOOLS
- You can choose more than one
- If you don't agree with the results of the quiz, choose another and explain why

HELP GUIDE
- Use the resources related to relating to help you as examples

Step 5 – Build risk communication tools and strategies

BUILDING
➔ CREATE YOUR STRATEGY
- Use the technical tools that fit your needs.
- Engage people with the app. How?
- Use the Repository
  - If there is not a good practice exist in the repository, use the methodology needed to search or create a new one.
- Use the nudging methodology to engage people with your strategy/ tools/ ideas

HELP GUIDE
- Use the resources related to building to help you as examples

RiskPACC
Integrating Risk Perception and Action to enhance Civil Protection-Citizen interaction

FIGURE 8: THE RISKPACC CONSORTIUM