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

NEWSLETTER 2

Welcome to the second RiskPACC Newsletter!

The RiskPACC project has entered its second phase. In RiskPACC, we consider the mismatch between how risk is perceived and actually acted upon. Notably, perceptions of risk and risk management actions taken by civil protection agencies and perceptions of the public have been shown to be often misaligned. We are opting to narrow this so-called Risk Perception Action Gap (RPAG) by adopting a co-creation approach to facilitate interaction and knowledge exchange between citizens, civil protection agencies, civil society organisations, researchers, and developers.

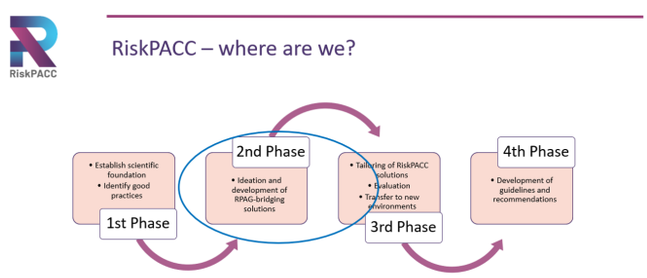
We are happy to regularly share project related news with you, and possibly welcoming you to one of our next events!

Dr. Maike Vollmer RiskPACC Coordinator

One year of RiskPACC

The completion of Work Package 1 and Work Package 2 concludes the first phase of the RiskPACC. This phase's key objective has been the establishing of the scientific foundations upon which future Work Packages and Deliverables will construct the RiskPACC solutions, framework, and methodology for enhancing disaster and community resilience and bridging the Risk Perception Action Gap.

Both WPs started with a desk-based literature review in an attempt to advance understandings of disaster resilience from the perspective of CPAs and community resilience from the standpoint of citizens, always with a focus on how these could be modified to bridge the identified RPAG.



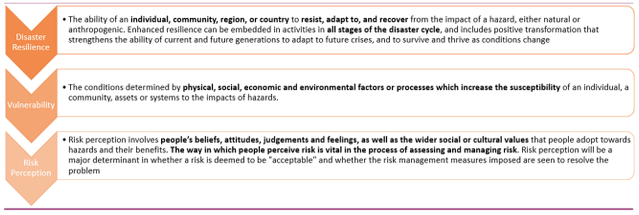
Both WPs review the current State-Of-The-Art related to key concepts such as disaster and community resilience and risk communication and perception, proceeding with the development of working definitions for the project. Building on this, RiskPACC will develop a detailed understanding of the role of human factors, societal dynamics and organisational arrangements related to building all-hazard disaster resilience.

Understanding good practices and challenges in Civil Protection policy and practice - Work package 1 results

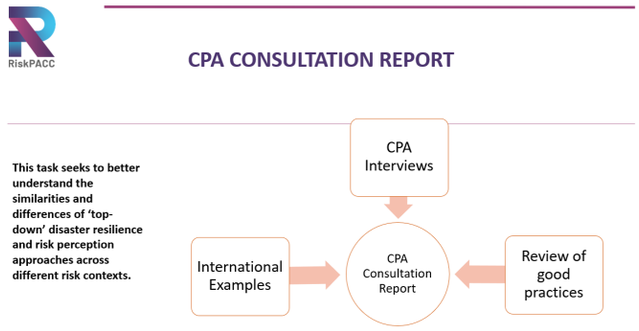
Work package 1 has set several objectives to be achieved: review the current state-of-the-art of disaster resilience and risk perception concepts and methodologies in research, practice and policy; establish a working definition of disaster resilience and risk perception; analyse the identified approaches and good practices through surveys and local dialogue focus groups with CPA's; define gaps between current practice and the state-of-the-art; develop a roadmap of key actions to advance the state-of-the-art and provide recommendations for the RiskPACC framework.

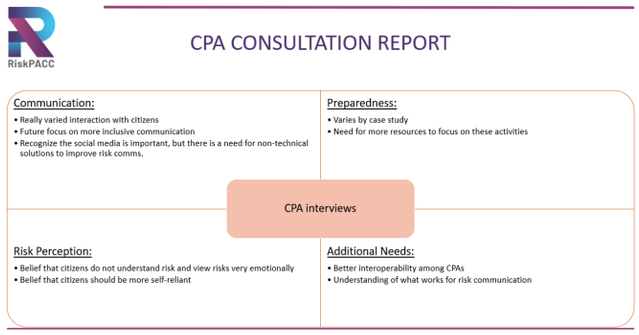
One of the aims of WP1 was to determine the current scope of disaster resilience and risk perception research, and to define those terms for the project.

The definitions:

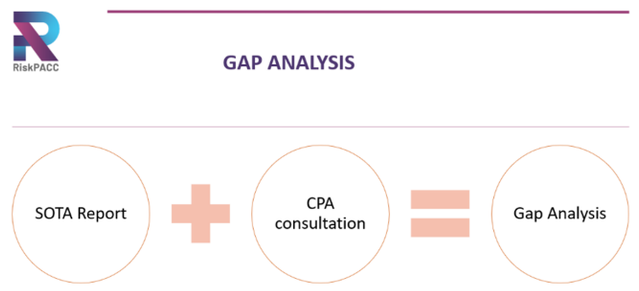


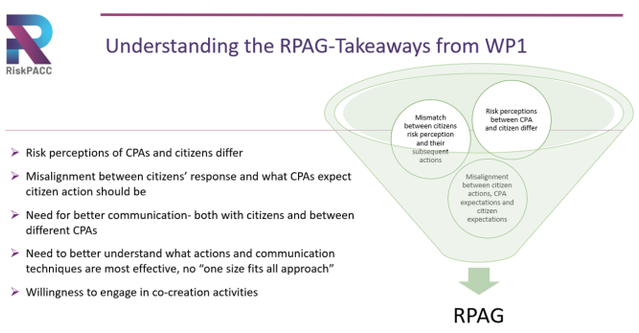
Results included the beliefs and views of different civil protection authorities at the local, regional, and national level as to their risk communication strategies, risk perception among CPAs and citizens, and challenges of current activities.





Moreover, WP1 was aimed at identifying the gaps and misalignments in the current operationalisation of disaster resilience and risk perception concepts, processes and methods by CPAs.





Engaging citizens to expand understandings of risks, vulnerabilities and data collection opportunities – Work Package 2 results

Work package 2, along with work package 1 are the two first work packages of the project, run from Month 1 (September 2021) until Month 8 (April 2022) and thus have been already concluded. The major objective of WP2 was to establish a solid theoretical foundation upon which the rest of the project will be conceptually relied.

In this context, research in WP2 started with a thorough literature review on existing definitions approaches and concepts surrounding community resilience, community risk perception and the potential of citizen generated data, and specifically Volunteered geographic information (VGI), to enhance community and disaster resilience. The most significant outputs of this work have been the working definitions of key concepts such as community resilience and community risk perception adopted for the entire project and clearly presented in the first months of the RiskPACC.

The work in WP2 continued with empirical research on existing understandings of community resilience across the project case studies, along with a documenting of practices and methods undertaken by individual citizens and community groups to capture their risk perception and contribute to disaster risk management. The results of the analysis have been presented in the form of Strengths Weaknesses Opportunities and Threats (SWOT) analysis, with the intent to present a better understanding of community practices across the case study areas in terms of their understandings on community resilience concept, community need in terms of disaster risk management as well as methods that are currently utilised to enhance and support disaster and community resilience.

WP2 was concluded with a series of gaps in the current state-of-the-art regarding community resilience from a citizen perspective have been identified and highlighted appropriately. Such gaps highlight that in there are significant considerations that need to be taken into account in order to allow citizen voices to be adequately heard and depicted in newly created datasets, as well as an improvement in communication between CPAs and community groups to avoid misalignment of risk perception and actions, in order to ultimately bridge the RPAG. The Report concludes with a detailed presentation of a Roadmap in the to address the identified gaps in SOTA through the outcomes and outputs of RiskPACC. The required actions that need to take place are mapped in relation to the respective gaps in SOTA and the prospective outcomes and they aspire to address.

The collective output from WP2 has been a detailed and expanded citizen-generated data understanding on risk and vulnerability; critical consciousness about environmental risks, enhanced local capabilities and a better understanding of citizen-led practices regarding risk management, and local development at the community, and neighbourhood levels. This will not only feed into the Risk Perception Action Gap framework, which will be developed in WP4 of this project, but also in the tool development and field validation phases that will follow in WPs 4 and 5. Future project activities are very ambitious and require determination and coordination by all RiskPACC stakeholders.

The final stage of WP2, which concludes the Work Package, is a gap analysis and progressive roadmap of key actions that will feed into the work of all subsequent Work Packages. Such actions are presented in this Report. The collective output from WP2 is aspired to be a detailed and expanded citizen-generated data understanding on risk and vulnerability; critical consciousness about environmental risks, enhanced local capabilities and a better understanding of citizen-led practices regarding risk management, and local development at the community, and neighbourhood levels.

Citizens & Civil Protection Interaction: how to reduce the "Risk Perception Action Gap"

(1st RiskPACC Awareness Workshop)

On June 27th, RiskPACC organized its 1st Awareness Workshop entitled – ***Citizens & Civil Protection Interaction: how to reduce the "Risk Perception Action Gap".***

The Workshop, with participants both online and in-presence, had a morning session with the usual welcome and remarks and an introduction provided by the RiskPACC Coordinator Dr. Maike Vollmer.

Maike gave a general overview of the project explaining the state-of-the-art of RiskPACC and the next steps and results.

Selby Knudsen, from Trilateral Research and WP1 leader, and Vangelis Pitidis, from University of Warwick and WP2 leader, took then the floor and presented the results, outcomes and achievements of the first 10 months of the project.

Selby conducted the session entitled "***Civil protection Perspectives of risk and disaster resilience: initial findings from the RiskPACC project***", presented the methodology (literature review, questionnaires, analysis, gap identification) used In the WP1, the key findings and results achieved.

Vangelis, with his session "***Engaging citizens to expand understandings of risks and enhance urban resilience: Initial findings from the case studies of RiskPACC***" presented the main outputs and achievement of his Work Package 2.

The last part of the morning session has been dedicated to the RiskPACC project sisters. RiskPACC has five related projects:

- LINKS "Strengthening links between technologies and society for European disaster resilience"
- RESILOC – Resilient Europe and Societies by Innovating Local Communities
- BUILDERS – Building Resilience in Europe
- ENGAGE
- CORE (sCience& human factOr for Resilient sociEty)

The session started with Sara Bonati from University of Florence and Filippo Giacinti from the European Organisation for Security (EOS). They represented the LINKS Project while Karsten Uhing from Fraunhofer gave a detailed description of the RESILOC Project.

Tor-Olav Naevestad from BUILDERS, Marie-Christine Bonnamour from CORE and Alberto Pasquini from ENGAGE presented important and crucial topics and spotlighted potential connections and relationships between their projects and RiskPACC.

The afternoon session was focused on two different working group sessions.

The first one, led by Maureen Fordham from University College London and WP4 Leader, referred to "***challenges in two-way communication to close the Risk Perception Action Gap***". The main goal of the working group was to share ideas about closing the Risk Perception Gap in disaster risk management, what is most important and how to do it and to gain insights to help develop our RiskPACC conceptual and methodological framework.

The second working group session, led by Jeannette Anniés from University of Stuttgart was dedicated to "***how technological tools help mitigate the Risk Perception Action Gap***".

The working session had the presence of user stories. They can be seen as an interface between technological solutions and user experience design, and they are written to give insights on technological tools and their functionalities, or other concepts. The session saw five different user stories facilitated and moderated by five project partners:

- Deborah Hugon, STAM
- Michalis Panagiotis, ICCS
- Linda Kroesbergen, Public Sonar
- Marget Azuma, University of Twente
- Jeannette Anniés, University of Stuttgart

The main aim of the session was to discuss about the user stories and try to find out benefits and disadvantages.

Past events

CERIS – Disaster Resilient Societies Cluster Conference, Brussels (23-25 March 2022)

DG HOME, as a follow-up of fruitful meetings in the Disaster-Resilient Societies (DRS) Thematic Area held from February to May 2021 within the "Community of European Research and Innovation for Security (CERIS)", encouraged H2020 projects to join forces for co-organising a DRS event under the CERIS umbrella on the 23-25 March 2022.

RiskPACC participated in the morning and afternoon session of the first Conference day, bringing experience and expertise about **DRR INTEGRATED RISK MANAGEMENT – NATURAL HAZARDS and SOCIETAL RESILIENCE.**

RiskPACC EU Project (4 May 2022)

Internal and virtual workshop to deepen the benefits of tracing and tracking applications over and beyond Europe. The presentation showed also a Case-Study highlighting the vital role of technological tools in informative talks on COVID-19.

“Completion of perception and action to enhance the interaction between Civil Protection and Citizens” Workshop (10 May 2022)

The Workshop on “Completion of perception and action to enhance the interaction between Civil Protection and Citizens” within the RiskPacc Project organized by the Municipality of Rafina Pikermi achieved a measurable success thanks to the variety of participants belonging to various categories such as members of Medicines Sans Frontiers, the Police, the Local and Regional Fire Department, the Region, the Coastguard, local cultural and athletic associations along with the local volunteer group, girl-scouts, teachers and local citizens. The twofold goal of the workshop entailed boosting the awareness of the citizens and improving their relationship with the Civil Protection Authorities, and strengthening voluntary associations.

PSCE Conference, Salzburg (11-12 May 2022)

On 11 and 12 May, it was held, in collaboration with the University of Salzburg and the Austrian Red Cross, the Public Safety Communications Europe (PSCE). The RiskPACC objectives were presented, such as: understand and close the Risk Perception Action Gap; facilitate interaction between citizens and Civil Protection Authorities; develop potential procedural and technical solutions to build enhanced disaster resilience; provide an understanding of disaster resilience from the perspective of citizens and Civil Protection Authorities; facilitate collaboration between citizens, civil society organisations, developers; provide the “Risk Pack” of solutions that will include a framework and methodology to understand and close the Risk Perception Action Gap.

EGU General Assembly, Wien (23-27 May 2022)

The RiskPACC Project participated to EGU 2022 General Assembly with two presentations, respectively on Integrating risk perception and technological solutions to enhance response to natural hazards –

presented by the University of Stuttgart (USTUTT) – and Immersive technologies to proactively prepare for and effectively respond to natural disasters – presented by the Institute of Communication & Computer Systems (ICCS).

Third European Conference on Risk Perception, Behaviour, Management and Response, Berlin (13-14 June 2022)

The Conference, organized at the Fraunhofer Forum in Berlin, saw the presence and participation of various experts in the sector from all over Europe. The second day of the conference started with presentations of three H2020 projects: ENGAGE, CORE and RiskPACC.

Selby Knudsen from Trilateral Research and responsible of RiskPACC's Work Package 1 presented the "Risk Perception Action Gap: Two-way communication in risk management", highlighting the research conducted in the first nine months of the project and the results achieved. The presentation was even focused on the lack of understanding the risk between citizens and CPAs, the communication that has to be built between them, the differences in CPA and citizen perception and the CPA activities to increase perception.

RiskPACC Plenary Meeting, Brussels (28 June)

The RiskPACC Plenary meeting took place on June 28th in Brussels. It was the first occasion since the KickOff meeting of September 2021 where all the project partners had the opportunity to meet and to discuss about the status of RiskPACC.

Project to Policy Seminar, Brussels (30 June - 1 July 2022)

The seminar hosts the EU Security Research and Innovation (R&I) Projects started in 2021, and it is a great opportunity of discussion and cooperation.

Sister Projects' corner

BuildERS

The overall aim of the BuildERS project was to improve resilience especially within European societies. Understanding societal resilience as dependent on individual capacities to deal with extreme events, the project sought to empower those who are currently most vulnerable to increase their potential to (re)act and contribute to crisis management. The BuildERS project was carried out during 2019–2022. The project was funded by the European Union's H2020 research and innovation programme.

BuildERS project findings

BuildERS has produced a wide range of different innovations such as tools and guidelines as well as policy recommendations over the last three years. In addition, the project has produced a large amount of knowledge, e.g. public reports describing the results of the project are available on the project website https://buildersproject.eu/. Public reports are also available on the EU platforms: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-results-platform and https://cordis.europa.eu/. Scientific papers directed more to the academic community are also available on the BuildERS website. All scientific papers are so-called open access documents—they are distributed online, free of access charges or other barriers.

In general, the BuildERS project has developed knowledge and insights to improve resilience in society. This has been done, in particular, focusing on the ability and capacity of the most vulnerable to be prepared and respond to disasters, improving and supporting their capacity to act will develop the society as a whole to be prepared and respond to natural and man-made disasters. Thus, the societal resilience of European communities will improve.

LINKS

LINKS "Strengthening links between technologies and society for European disaster resilience" is a comprehensive study on disaster governance in Europe. The overall aim of the LINKS project is to strengthen links between technologies and society for improved **European disaster resilience**, by producing sustainable advanced learning on the use of **social media and crowdsourcing (SMCS)** in disasters.

Visit the website

Many activities have been implemented by the LINKS Consortium during the last months:

- LINKS's participation in the **Accessibility Days 2022** in May 2022 with the workshop "Progettare soluzioni interattive inclusive per la comunicazione in situazioni di emergenza" has contributed to the refinement of the LINKS activities on disaster risk perception and vulnerability.

- LINKS also closed out the second year with the **first in-person consortium meeting since the project began**. The meeting was held in Split, Croatia in June 2022. The two day meeting included a series of workshops aimed at discussing local experiences around risk communication and crowdsourcing, and testing some LINKS results.

- In July 2022 University of Firenze presented the work entitled "**The coast isn't clear: climate justice implications of communicating urban flood risk in affluent vulnerable communities**" as part of the special event "Climate justice in future cities: geographical perspectives for inclusive urban resilience and adaptation" of the Smart and Sustainable Planning for Cities and Regions. They also presented the work "**Alternative or complementary? A critical mapping of the practices of crowdsourcing to respond to emergencies in Italy**"' during the scientific conference Geography and Technology organized by Società di Studi Geografici.

- LINKS will be taking part in a **number of events and activities in the last half of 2022**. Some of the most interesting on the agenda include a co-hosted workshop with the project RESILOC in Copenhagen in November, which will aim at bringing DRM stakeholders together from the Nordic and Italian regions to discuss and validate project results. The workshop will be followed by a joint panel at the NEEDS conference, discussing the intricacies of **citizen involvement in the work of EU civil protection, given the ever changing risk landscape**. And in November LINKS will be presenting at the follow up event to the CERIS meeting in March, together with the DRS-01 cluster projects.

RESILOC

The **overall goal of RESILOC** is to identify new strategies for improving on the processes of **preparedness of local communities against any kind of hazards, either planned or unplanned.**

Visit the website

- RESILOC had the opportunity to participate in a preparatory-day session during the European Forum for Disaster Risk Reduction (EFDRR2021) and was invited to present the project as part of the innovation platform of the **UNDRR Global Platform** in Bali from 23 to 28 May 2022. The delegation presented the RESILOC Platform, its Dimensions, Indicators and Proxies (DIPs) framework as well as experiences gained from the field trials with local communities in Catania (Italy), Gorizia (Italy) and Tetovo (Bulgaria).
- From 13 to 14 June 2022 the Project RESILOC hosted alongside RiskPACC the **3rd European Conference on Risk Perception, Behaviour, Management and Response (ECRP22)** in Berlin. During this occasion dedicated experts from the Risk-SoS Group and the Horizon 2020 affiliated DRS 01 Research Cluster came together to discuss research results and engage in workshops to better understand risk perception and behaviour patterns in Europe and to find ways to harmonise their assessment and monitoring.
- In occasion of this year's **Civil Protection Forum** (28-29 June 2022) in Brussels, RESILOC represented the opening panel together with representatives of the WHO and the Covenant of the Mayors.

ENGAGE

ENGAGE is an EU-funded project, started in July 2020, whose mission is to provide novel knowledge, impactful solutions and emergency response guidelines for exploiting Europe´s societal resilience. Solutions will aim at **bridging the gap between formal and informal approaches to risk and emergency management, increasing the ability of communities to adapt before, during and after disaster.**

Visit the website

Project ENGAGE presented its recent advances in research on societal resilience at the Public Safety Communication Europe **Annual Meeting** in Salzburg, on May 11 and 12th, 2022. As one of the partners of the consortium of sixteen, Everbridge division One2many coded and realized a prototype of a public warning chatbot, based on the blueprint study of the Disaster Management Department developed by the University of Tel Aviv, another partner.

Among other relevant events, it is worth mentioning:

- EENA Conference & Exhibition 2022, 27-29 April (Marseille, France);
- ENGAGE first in-person KI-CoP Workshop, 26 April (Marseille, France).

CORE

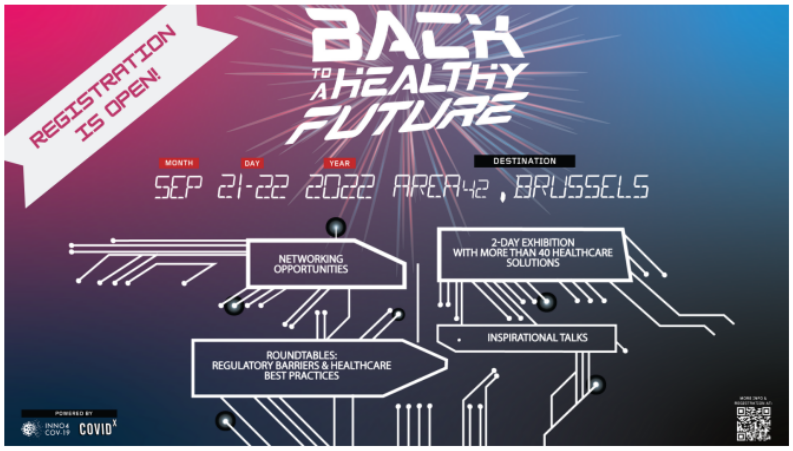
CORE (sCience & human factOr for Resilient sociEty) is a multi-disciplinary consortium established to understand how to define common metrics with respect to the different natural and man-made disaster scenarios, and how to measure, control and mitigate the impact on the populations, particularly on vulnerable groups: disabled, elderly, poor, as well as women and children. It contributes to Horizon 2020's focus on secure societies where citizens are facing increasingly threatening situations.

Visit the website

Throughout the last months, CORE has been presented in **various events**:

- CERIS - Disaster Resilient Societies (DRS) Conference in Brussels (Belgium), by the European Commission (DG HOME) [March 23, 2022];
- Human Factors and Ergonomics Society (HFES) Europe chapter Annual Conference in Turin (Italy) [April 20, 2022];
- European Geosciences Union (EGU) 2022 in Vienna (Austria) [May 23 & 25, 2022];
- Global Ecological Integrity Group (GEIG) 2022 in Salerno (Italy) [June 29 & July 1, 2022];
- Projects to Policy Seminar by CERIS in Brussels [June 21 & 22, 2022].

Other info/news



COVID-X and Inno4cov-19 are organizing an event **on the 21st and 22nd of September in Brussels** to highlight innovation developed by European companies. There will be space for projects and companies to showcase their results and solutions, matchmaking sessions with relevant stakeholders, and brainstorming and round tables on lessons learnt and impact. You can check the agenda here and register at this link.

In June 2022, DG ECHO released the issue 5 of its Newsletter.

Visit our website

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101019707. This webpage reflects only the author's view and the Research Executive Agency (REA) and European Commission cannot be held responsible for any use that may be made of the information it contains.

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