



## COLLOQUIUM 1



**Project acronym:** BuildERS

**Project title:** Building European Communities' Resilience and Social Capital

**Call:** H2020-SU-SEC-2018-2019-2020/H2020-SU-SEC-2018



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 833496

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<b>Project no.</b>	833496
<b>Project acronym:</b>	BuildERS
<b>Project title:</b>	Building European Communities' Resilience and Social Capital
<b>Call:</b>	H2020-SU-SEC-2018-2019-2020/H2020-SU-SEC-2018
<b>Start date of project:</b>	01.05.2019
<b>Duration:</b>	36 months
<b>Deliverable title:</b>	D6.7 Colloquium 1
<b>Due date of deliverable:</b>	May 2020
<b>Actual date of submission:</b>	17.09.2020
<b>Deliverable Lead Partner :</b>	VTT
<b>Work Package:</b>	WP6 Co-design and co-development with Stakeholders
<b>No of Pages:</b>	46
<b>Keywords:</b>	BuildERS, dissemination, vulnerability, social capital, risk awareness, resilience

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#### Dissemination level

PU	Public
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#### History

Version	Date	Reason	Revised by
01	26.06.2020	First draft of the deliverable	Jaana Keränen
02	18.07.2020	Comments from review FI/GEO; CM/UiS; MS/EKU	Jaana Keränen
03	28.08.2020	Comments from IP/VTT	Jaana Keränen
04	10.09.2020	Final version to be submitted	Jaana Keränen
<b>Final</b>	17.09.2020	Report submitted	A-M Heikkilä



## Executive Summary

During the BuildERS project, three so-called global resilience research colloquia are planned to be organised. They are a part of the implementation of WP6 Co-design and Co-development with Stakeholders. The aim of WP6 is to support and facilitate interaction between researchers, citizens, volunteer groups, NGOs, authorities, technology providers and other stakeholders throughout the project lifecycle. It also provides the WPs 1-5 critical supportive, facilitation service, and produces iteratively new knowledge from the WPs for the sequential WPs and tasks.

This document provides the results of the BuildERS first online colloquium taken place on 9<sup>th</sup> June 2020. The presentations offered insights of the work done in WP1 and WP2 during the first year. Presentation 1 introduced the construction of BuildERS theoretical framework on how risk awareness, risk perception, social capital and vulnerability are connected to the overall work of resilience building. Presentation 2 presented challenges in measuring vulnerability looking at national and cross national surveys as primary sources. Presentation 3 addressed individual and group vulnerabilities in crisis management and offered insights on how different countries deal with vulnerable groups in crisis management. Presentation 4 presented institutional rules, practices and experiences in handling misinformation in disaster management. Presentation 5 clarified findings of vulnerability and vulnerable groups in past crises and disasters in the Finnish context.



## Table of Contents

Disclaimer .....	1
Executive Summary .....	3
Table of Contents .....	4
List of Acronyms .....	5
List of tables .....	6
1. The main goal and arrangements of colloquium .....	7
1.1. Colloquium planning .....	7
2. Presentations.....	7
2.1. Claudia Morsut, University of Stavanger – Norway: <i>The conceptual approach of BuildERS</i> .....	8
2.2. Christian Kuran, University of Stavanger – Norway: <i>Challenges in measuring vulnerability</i> .....	9
2.3. Kati Orru, University of Tartu – Estonia: <i>Addressing individual and group vulnerabilities in crisis management</i> .....	10
2.4. Sten Torpan, University of Tartu - Estonia: <i>Institutional rules, practices and experiences in handling misinformation in disaster management</i> .....	11
2.5. Jaana Keränen, VTT - Finland: <i>Linkages between risk awareness, social capital and vulnerability at national level</i> .....	12
3. Next steps.....	13
4. Conclusions .....	13
Appendix 1: Claudia Morsut, University of Stavanger – Norway: <i>The conceptual approach of BuildERS</i> .....	14
Appendix 2. Christian Kuran, University of Stavanger – Norway: <i>Challenges in measuring vulnerability</i> .....	22
Appendix 3: Kati Orru, University of Tartu – Estonia: <i>Addressing individual and group vulnerabilities in crisis management</i> .....	30
Appendix 4. Sten Torpan, University of Tartu - Estonia: <i>Institutional rules, practices and experiences in handling misinformation in disaster management</i> .....	33
Appendix 5. Jaana Keränen, VTT - Finland: <i>Linkages between risk awareness, social capital and vulnerability at national level</i> .....	36
Appendix 6: The first BuildERS colloquium invitation .....	43
Appendix 7: Registered for the colloquium .....	45



## List of Acronyms

AB	Advisory Board
BuildERS	Building European Communities Resilience and Social Capital project
D	Deliverable
DoA	Description of Action
ENGAGE	Engage Society for Risk Awareness and Resilience
LINKS	Strengthening links between technologies and society for European disaster resilience
NGOs	Non-governmental organisations
RESILOC	Resilient Europe and Societies by Innovating Local Communities
SRA	The Society for Risk Analysis
WP	Work Packag
VTT	Technical Research Centre of Finland



## List of tables

Table 1. Organisations participated in the colloquium .....	45
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# 1. The main goal and arrangements of colloquium

The BuildERS project looks into institutional, community, group and individual resilience in different kind of hazards, risks, crises and disasters. The project aims to improve European societal resilience by strengthening societies' social capital, risk awareness and preparedness. An important additional element is the use of social media in crises and disasters and their influence on risk perception, risk and crisis awareness. The project's results will help improving government policies aimed at enhancing European communities' resilience through concrete policy recommendations on, for instance, how to minimise communication-related vulnerabilities in future crisis contexts.

The main goal of the first research colloquium was to share research results from the first year of the project. The colloquium focused on WP1, which establishes the theoretical framework for BuildERS, and WP2, which focuses on the institutional side of resilience management.

The colloquium invitations were sent to BuildERS partners including Advisory Board (AB) members. The other ongoing or just started DRS01 projects RESILOC, ENGAGE and LINKS contact persons were also invited to the colloquium. In addition, the BuildERS partners shared the invitation within their own networks.

The invitation of the colloquium including the agenda is in appendix 6.

## 1.1. Colloquium planning

Originally, the BuildERS colloquium was supposed to be a panel presentation at the 2020 SRA (The Society for Risk Analysis - Europe) Conference, but due to Covid-19 pandemic, the SRA Europe Conference was postponed to June 2021. Thus, the colloquium was organized as a separate online event via GoToMeeting software.

The plans were changed very fast. Since the abstracts of the presentations and a rough frame for the agenda were already made, the planning of the colloquium was quite prompt. Two meetings were arranged via Teams to finalise the agenda of the event and solve other main issues regarding the arrangement. We chose to have a moderator for the event to facilitate conversation and make a short wrap up at the end. It was decided that after each presentation a short discussion would follow, as well as at the end of the event.

We chose GoToMeeting to be the meeting platform, since it does not require registration of participants and should be approved to use by many organisations. Finally, we tested GoToMeeting platform, finalised the plans, and were ready for the event.

## 2. Presentations

There were given five presentations at the colloquium. In the next chapters, each of them are shortly summarised and the main points of discussion described.





## 2.1. Claudia Morsut, University of Stavanger – Norway: *The conceptual approach of BuildERS*

The first presentation in the BuildERS online colloquium concerned the theoretical framework from WP1, where the terms vulnerability, resilience, social capital and risk awareness are defined for the BuildERS project. The presentation showed the results of a scoping study and a simplified Delphi process, which led to the definitions of the main concepts and a model for the BuildERS project. The scoping study was very broad at the beginning and then was narrowed down towards an exploration of the literature on crises, disasters and disaster risk reduction. This process allowed to explore a vast and varied scholarship.

As for the term social vulnerability, it was noted that it is important to uncover and discuss vulnerability, beyond pre-defined categorisation of social groups, by targeting the root causes of vulnerability as vulnerability is mainly socially constructed. The scientific community needs to pursue more research on root causes, such as injustice and discrimination, to offer policy makers venues for tailoring policies properly targeting these issues.

As much as social vulnerability, social capital is also socially constructed. Research shows that social capital is often studied during or after a crisis, but it is, as well, important to understand how social capital works in “normal” situations to be able to promote policies and measures that strengthen groups and communities’ ties and networks. Indeed, the so-called dark side of social capital, with negative spill over effects can exacerbate discrimination and stigmatization between social groups.

As for societal resilience, one of the most researched and contested concept, it is often used as an antonym for vulnerability. However, BuildERS promotes the message that resilience and vulnerability coexist and are intertwined. A social group, a community or a society can display elements of resilience and vulnerability at the same time. In addition, an important point raised during the presentation concerned the politics of resilience. Do we want a social-democratic resilient society, where the state deals with crisis or disasters on behalf of the individual and aims at getting ever better prepared or do we want a more neoliberal resilient society, where the state just enables and facilitates individuals’ ability to deal with their own risks? In this regard, the Covid-19 pandemic is a good example of a crisis that triggers this type of question

The last concept presented was risk awareness, which was found to be the most challenging of concept, since a scientific could not be found. Risk awareness is often used as a synonym or a component to risk perception, and it is often mentioned together with risk preparation and worry. BuildERS seeks to draw a clearer line better between risk awareness and risk perception.

Before the discussion, the presenter showed the BuildERS model. This model has been through several changes and discussions, thanks to constant feedback. When designing the model, several crisis management models were compared and looked at, but the conclusion was that it is difficult to visualize complex phenomena.

After the presentation, the discussion revolved mainly around the model on the necessity to provide an explanation, since the visualisation of the concepts and their interrelations are not easily understood only by looking a figure. At the beginning of the process of drawing the model, the crisis management cycle with its phases - preparedness, response, recovery, mitigation - was the basis. But in the second stage, based on the feedback, the model was simplified to take in account three crisis phases: pre, acute and post crisis phases. The presentation of the model caused an interesting



debate, as for which levels should be taken into account: for instance, individual, group or society level, or local, regional or national. In the colloquium discussion, it was concluded that there are system dynamics between the different elements of the system.

Another important issue raised during the discussion was how to operationalise the model and the relationships among the concept and which eventual measurement device could be used. The presenter explained that the main aim of WP1 was to serve a theoretical framework and a model to the other WPs and that the empirical work was the main goal of the other WPs. Especially WP3 and WP4 help to uncover issues that the theoretical framework does not include.

## 2.2. Christian Kuran, University of Stavanger – Norway: *Challenges in measuring vulnerability*

The second presentation began with presenting the early BuildERS model and explaining problems in model development. The first BuildERS model was based on the commonly known bow-tie model, which is often used in crisis management context. The first major problem was that it has too much content and did not work regarding BuildERS empirical objectives. A challenge was to decide, how many levels of vulnerability the model should include; should it be governmental, institutional, group level and/or individual vulnerability. It was too complicated to try to fit all of them, so the level of vulnerability is now a mixture of different levels. The presenter also noted that all groups are made of individuals having their specific vulnerabilities, as the intersectionality perspective rose naturally into the subject. An important reminder was that in the BuildERS project, when asking who is the most vulnerable, the answer is that it strongly depends on the context.

A list of recurring challenges were introduced, such as living conditions, health, age and trust. When choosing variables for studies, the importance of validity and reliability was emphasised. Ideally, in quantitative studies of vulnerability during crises, the studies would include the same people in pre- and post-crisis phases, but in reality, this is very difficult to achieve. Again, the importance of a systematic intersectional approach was mentioned, and suggestions how to ensure this were mixed method methodologies and collecting data from various sources (official public international and national surveys, grey literature, scientific literature).

As with the previous presentations, a discussion was held after the presentation. First, a deeper explanation concerning factors, elements and variables was asked for. The presenter explained that all the results are from the scoping study, and each variable is from different national context. For example, one variable had “age: person +65 years” as a vulnerability variable but as this is from the national context, it is not applicable itself. e.g. in Norway, a person +65 is not vulnerable per se. Typical, they have finished their professional career, they have more resources than most people do (institutions providing protection from diseases, public health system etc.), they often support their children, and sometimes they even take care of their own parents. Cross-survey studies or cross-national studies are challenging to do in Europe, and it comes even more complex, if countries outside Europe are involved too. An issue, which was also later raised, is the importance of reliability and validity when choosing an indicator. Also, the pragmatic element should be added to this: it is always the question of if such data exists and is available within reasonable effort. A practical and pragmatic challenge is availability, meaning for example, are people willing to answer their phones or go do in-depth studies.



### 2.3. Kati Orru, University of Tartu – Estonia: *Addressing individual and group vulnerabilities in crisis management*

The third presentation focused on the WP2 with the title “Addressing individual and group vulnerabilities in crisis management”. It was found out that there are many different interpretations and practices for addressing vulnerability in different countries. In the Nordic countries, the personal capacities are seen as the key trigger for vulnerability or resilience. Less attention has been put into power relations or societal inequality, even though they might actually be the root causes for vulnerability. Building awareness among marginalised groups has been addressed in communication, but not on the aspect of the actual preparation or support structures to enhance preparedness and resilience.

The presentation clarified how different countries have defined vulnerability. A finding was that, for example, a rather quantifiable vulnerability assessment has been done in some countries, such as Italy, Belgium and Germany. In the study, one of the key subject was the horizontal social support networks. Many documents, like crisis preparedness guidelines, bring this aspect out at least in some level, but the practical actions were identifiable only in Norway and Finland.

The presentation concluded that there is limited addressing of individual vulnerabilities (with exceptions). Understanding how vulnerable groups can be identified is still patchy. Consideration was brought up by interviews that there are unclear implications on “what we do with this knowledge of who are vulnerable groups before a crisis”. Rules and regulations must be instituted here. Development is needed for coordinated efforts between local authorities, services and sectors, and the need for much better guidelines.

The online discussion started with the question of how the researchers have dealt with people, who are sometimes vulnerable and sometimes not. Answer was that assessing vulnerability and understanding of those, who are more prone to be poor or adversely affected in crisis situations, are needed, and this support managing crisis in a more efficient way as long as these assessments are used prior to crisis. Vulnerability is strongly situational determined, and after all, anyone can be vulnerable.

The term “patchy understanding” was again raised and a viewer asked, if there is some kind of connection of not understanding the issue, and then pushing local authorities for action. The answer was that different municipalities have different capacities in assessing vulnerability and utilising knowledge from these assessments. There are differences between countries how responsibilities are assigned to local level, and in what extend resources are allocated to cover responsibilities. Nevertheless, social services have responsibility for people, but are social workers ready to take into account vulnerability also in crisis situations. The “dark side of social capital” was again brought into discussion: who do you want to help in crises?

A big threshold is confidentiality of personal data. It is difficult to create registries on peoples' location regarding vulnerability. One authority may have data regarding vulnerability of a certain group, but not allowed fully share data with other operational authority. This problem is studied more deeply in BuildERS case studies, for instance in Estonian case study.



A remark was that a register of individuals' vulnerabilities is a big issue because of confidentiality. This issue is studied in the WP4, where the use of such register is looked at and the legal, institutional and ethical boundaries are considered more detailed.

## **2.4. Sten Torpan, University of Tartu - Estonia: *Institutional rules, practices and experiences in handling misinformation in disaster management***

The fourth presentation was about institutional rules, practices and experiences in handling misinformation in disaster management. The presentation focused on the cross-country analysis of crisis management, which was a part of the WP2. Emphasis of the cross-country analysis was on vulnerability to information and how emergency management institutions tackle false information. The results of the cross-country analysis showed that false information (or misinformation) has not yet been officially defined. The presenter preferred to use the word 'false information' instead of 'misinformation', as recent studies have pointed out that misinformation refers to information that is spreading without malcontent. Misinformation could also mean that people spread false information in good faith, as they do not know the information is false. Additionally, the word "mal-information" was introduced. The term refers to true information that is intentionally spread to create confusion.

The cross-country analysis examined the rules, practices and experiences in defining false information and responding to it. The current rules are linked to conceptual understanding of the false information phenomenon. The practices of tackling false information and mitigating people's vulnerability to it are explored in the light of real institutions' capabilities to act in handling false information. The study of "experiences" enabled a look into the institutions' past experiences, whereas the main subject was whether and how has false information made people vulnerable in the past. The cross-country analysis gave a good general understanding of main false information conceptions in the selected countries.

After the presentation, a viewer commented that the country results might be compared to the results showed earlier in Kati Orru's presentation where it was underlined that authorities/officials should comprehend the necessity to be more active on social media. In WP2, lot of interviews with strategic communication officials have already been carried out. They have revealed that the use of social media by emergency managers is on the rise. Nevertheless, people are already exposed to false information during crises. The institutions are trying to mitigate this risks by adequate legislation. One risk, for example in Estonia, is the highly decentralised crisis management system, where each sector is responsible for their own crisis communication. They can ask help from central government communications' office, but they are still responsible for the overall communication themselves. Future legislation will help to mitigate the risks. Currently, without clear rules and legislation, citizens might take a social media post for an official opinion or guideline. This has already happened in the US, and can lead to a chaotic situation. Operational guidelines for handling misinformation are in preparation, but the generalisation on the European Union level is difficult due to variety of countries and systems. The issue is further discussed in the study.



## 2.5. Jaana Keränen, VTT - Finland: *Linkages between risk awareness, social capital and vulnerability at national level*

The last presentation of the colloquium concerned the linkages between risk awareness, social capital and vulnerability at national level. The linkages were presented in the Finnish context with first giving some general background information on Finnish society's trust, income distribution, risks and challenges.

In Finland, risk awareness or elements of risk awareness are examined more on the individual level and there are many studies focusing on individuals' experiences, like national victim of crime survey and studies on citizen's perception of security and sense of security. An example of risk awareness is how experiences of violence and sense of security do not always meet, e.g. old people may not experience violence but they may still be afraid of it. A finding was also that citizens in rural areas are more prepared for extreme events than people living in urban areas.

In the Finnish context, social capital is a part of individual welfare. In more general level, welfare is based on health, prosperity and perceived quality of life. Also, high-level housing conditions and environment, employment and working conditions and decent income level support welfare. Volunteering and social networks are a part of social capital, and in Finland, volunteering is highly popular and its importance for well-being is recognised. People in Finland have a strong belief in getting help from others, such as close relatives, in a crisis situation, but naturally the feeling of security decreases if there has been realised accidents or crimes.

The term vulnerability is not widely used in Finland, and in most cases, it is exploited to describe the sectors of vital functions, which may be under threat. In general, vulnerable groups in Finland are elderly, poor people, homeless people, undocumented migrants and NEETs. NEETs are people 20-24 years of age who are not in education, employment or training. This is a special group that could not be found in other country-specific studies regarding vulnerable groups. In BuildERS, vulnerable groups in different crises such as heavy snowfall, water contamination, heat waves and radicalisation were examined. Each case study revealed crisis-specific list of vulnerable groups.

After presentation, the discussion focused on how the presenter considered social support. It was explained to be one element of social capital, and for instance, volunteering and third sector include this kind of action. Another comment concerned the definition for marginalized people asking if there is a clear definition or what definition did the researchers use. The answer was that there is not (yet) a clear definition for marginalized people, but at least some definition should be made.

The terms used in BuildERS are not simple and the terminology must be standardised. All the key concepts used in BuildERS project are defined in the WP1, and the findings of case studies feed to WP1's theoretical definitions. A major challenge of definition is that used definitions (and terms) vary depending on the sources used. United Nations, European Union and research papers use all their own definitions. In the colloquium, an open invitation was called to "invite all of you to contribute to the work on building the terminology annex. If you have good resources and definitions, please contribute."





### 3. Next steps

Lastly, the colloquium had a short discussion on how to get involved in the BuildERS project. The colloquium was recorded and the video recording was later downloaded to BuildERS website (<https://buildersproject.eu/>). An email to all colloquium participants was sent with the presentation slides and link to BuildERS web pages. By following the BuildERS web pages, participants may get the latest information on project results and forthcoming events. There will be two research-oriented colloquia later on during the project.

The future of WP1 and WP2 were presented as they were the two work packages mainly discussed in the colloquium. The Covid-19 pandemic has slightly delayed WP1 but it is almost finished. The final version of BuildERS framework will be published in D1.2, and peer-review articles will be prepared to explain more deeply work done in WP1. In WP2, several publications based on the empirical data have been worked on. Due to Covid-19, pandemic studies have been added to the research and the approaches from those studies widen misinformation and disinformation aspects. The most vulnerable people's situation during the pandemic is also taken into account.

### 4. Conclusions

As professor Pekka Leviäkangas, the moderator of the event, pointed out in his opening speech, resilience of critical infrastructure has been extensively studied, but resilience of people, groups and citizens less. BuildERS aim to improve the overall resilience of people and communities, and thereby the whole society, by focusing on the most vulnerable individuals, groups and communities. The results from WP1 and WP2 will be diligently tested, reviewed and translated to policy recommendations in forthcoming WPs. Stakeholders will be closely engaged in validation and innovation processes to ensure the utility and relevance of the project's findings.

This first research colloquium worked well in the on-line format. It brought together 37 participants from various organisations to share information and discuss resilience, vulnerability, risk awareness and social capital. Nine participants were outside the consortium and 28 participants belonged to the BuildERS consortium.

Online webinars have both pros and cons. As a positive side, a webinar can reach more people. It might be easier to attend online event, and the number of participants does not need to be restricted. Participants do not have to travel, which is both ecological and economical. As a negative side, active web-based discussion demands efforts from the organiser as well as participants. The virtual world denies face-to-face interactions, which are useful to get to know each other.

In the BuildERS online colloquium, the discussion sometimes was limited to asking the presenter more precise explanations concerning his/her presentation, which made the discussion more question - answer based instead of more natural discussion with various comments and remarks. In any case, organising the event in such short notice and catching up with many participants was a good result. BuildERS will take into account the insights from the discussion in the future work by carefully examining the comments and analysing the needs of elaboration, specification and revision of the preliminary results.



## Appendix 1: Claudia Morsut, University of Stavanger – Norway: *The conceptual approach of BuildERS*



**Vulnerability, social capital,  
resilience and risk awareness:  
a theoretical model**

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This project has received funding from the  
European Union's Horizon2020 research and innovation  
programme under grant agreement No. 833496

### SOCIAL VULNERABILITY

Results from the literature review:

- **vulnerability is more socially constructed than we thought**  
root causes of vulnerability, such as factors that cause injustices, discriminations and stigmatization, need more analyses
- **vulnerability is more a dynamic than a static characteristic of individuals and groups**  
tension between existentialist vs essentialist characteristic of vulnerability
- **more systematic use of the intersectionality perspective in studying vulnerability to provide more precise data**  
the more vulnerability is treated as an intersectional phenomenon, the more planning and preparedness are difficult to achieve

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## SOCIAL VULNERABILITY

**situational inability (or situational weakness) of individuals or groups to access adequate resources and means of protection to anticipate, cope with, recover and learn from the impact of natural or man-made hazards**

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## SOCIAL CAPITAL

Results from the literature review:

- **social capital is more socially constructed than we thought**  
the "dark side" of social capital as a consequences of factors that cause injustices, discriminations and stigmatization
- **social capital studied mostly during a crisis or after, in the recovery phase**  
little on how social capital "is" before a crisis and how this influences during and after crisis
- **social capital's main units of analysis are communities, neighbourhoods, families or households**  
little on vulnerable groups' social capital

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## SOCIAL CAPITAL

networks, norms, values and trust that people have available to them and which may offer people resources for mutual advantage and support

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## SOCIETAL RESILIENCE

Results from the literature review:

- popular and used concept with several definitions (ability, quality, process etc.)

"Resilience is mysterious" (Dunn Cavelty et al. 2015: 3)

- often studied as the antonym for vulnerability

is it always so that an individual, a group, a community or a society is either resilient or vulnerable?

- the politics of resilience

balance between social-democratic resilient society and neoliberal resilient society

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## SOCIETAL RESILIENCE

processes of patterned adjustment and adaptation enacted in our everyday life, but in particular in the face of risks, crises and disasters

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## RISK AWARENESS

Results from the literature review:

- **no formal definition for risk awareness**
  - same as risk perception?
- **often mentioned together with risk preparation and worry**
  - a "component" of risk perception?
- **risk awareness and risk communication**
  - strong connections, but risk communication often studied as one directional flow of information

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## RISK AWARENESS

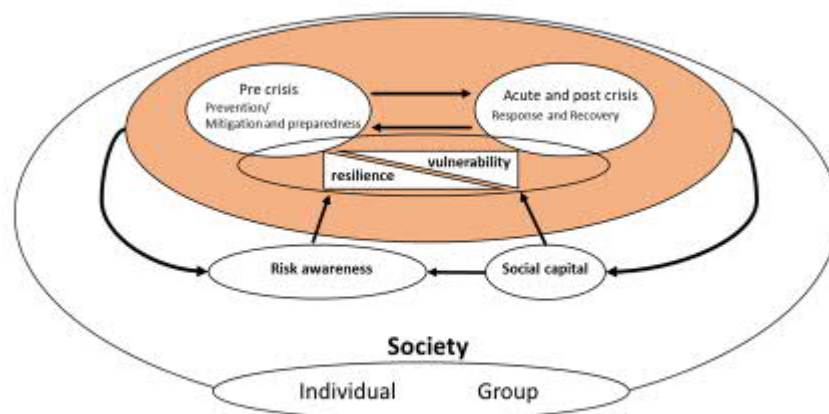
individuals, groups, societies, and communities' acknowledgment about a risk and potential assumption of a certain behaviour to prevent or mitigate the risk

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## CORRELATIONS



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## CORRELATIONS

1. not linear
2. “measurements” heavily subjective
3. exemplification of very complex phenomena

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## CORRELATIONS

- Pre-existing social capital provides support during and after a crisis:
  1. facilitation of coordinating actions -> lessen vulnerability
  2. security net -> strengthen resilience
  3. access to resources -> strengthen resilience
  4. source of knowledge and communication -> risk awareness

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## CORRELATIONS

- Risk awareness provides support in the pre crisis phase:
  1. acknowledgment of a risk -> thanks to social capital -> resilience building
  2. sharing of information and communication -> thanks to social capital -> resilience building

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## CORRELATIONS

1. How does social capital affect risk awareness? Does the size and/or number or the type of the networks and groups an individual has access to affect a meaningful way the acknowledgement of risks and/or the potential behaviour to act to reduce or eliminating risks?
2. How does risk awareness affect vulnerability and resilience? Does the individual acknowledgement of risk increase or decrease vulnerability in a pre-crisis phase? Does this change in an acute crisis context?
3. How does social capital affect the nexus resilience-vulnerability in various contexts? Does the size and/or number of networks and groups an individual has access affect the way he/she is able to respond to a crisis?
4. Looking more broadly, if resilience is the end goal, what degrees of improvement of social capital, vulnerability, and risk awareness are required to achieve resilience?

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**THANK YOU**

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## Appendix 2. Christian Kuran, University of Stavanger – Norway: *Challenges in measuring vulnerability*



### Challenges in measuring vulnerability - lessons from BuildERS

9 June 2020

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European Union's Horizon2020 research and innovation  
programme under grant agreement No. 833496

## Background I

1. Vulnerability in BuildERS
2. Work package 1
3. Modelbuilding
4. Challenges encountered
5. Methodological consequences

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## Background II

### Vulnerability and it's importance for BuildERS

#### WP1: A unified theoretical framework

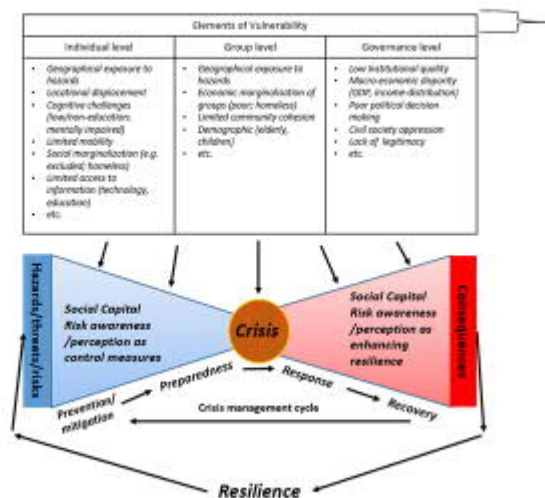
#### HOW:

- scoping study of scholarship about vulnerability, using data grey literature, peer reviewed- journals and public data and white papers.



## Models I

### Early Model For D1.2





## D1.3: REPORT ON SEGMENTS OF VULNERABILITY COUNTRY BY COUNTRY BASIS

- *T1.2 Identification of segments of vulnerable populations: Assessing vulnerability includes identifying pre-disaster social and cultural factors that engender and perpetuate inequality, exclusion, and lack of access to and control over resources in a population.*
- *T1.3 Identification of segments of vulnerable populations outside the official data: The characteristics of vulnerable segments of populations not picked up by pattern recognition analyses will be mapped by drawing on literature and media reports from a sample of central events occurring in Europe and outside Europe during the past 15 years.*

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## D1.3: REPORT ON SEGMENTS OF VULNERABILITY COUNTRY BY COUNTRY BASIS

### *Scientific literature*

- *Surveys and databases such as: CRED*<https://www.cred.be/>. Annual Disaster Statistical Review; the International Disaster Database (<https://www.emdat.be/>).
- National peer-review articles

### *Grey literature*

- *Country overviews using official data*
- *Case of various crises from Estonia/Finland/Norway/Sweden*

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## Recurring challenges I

- Level of analysis
- Categories
- Factors
- Context / Exposure

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## Recurring challenges - Levels

- Governmental
- Institutional
- Group
- Individual

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## Recurring challenges – categories

- Elderly
- Young
- Physically impaired



## Recurring challenges: Factors / elements / variables

- 1) Living conditions: house quality, location of the house, access to services, but also theft rate, homicide/assault/robbery rate and corruption level
- 2) Economic and financial conditions: income, economic capacity, health care expenditure, unemployment rate, GDP per capita
- 3) Education: access to education, expenses for education, offer of education
- 4) Nutrition: food security, access to food
- 5) Poverty: material deprivation, at-risk-of-poverty-rate
- 6) Health: access to medical services, expenses for health, mental and physical impairments, mortality, suicide rate, infant mortality
- 7) Age: elderly often defined as 65+, children age <15
- 8) Trust: level of corruption, trust in public institutions



## Recurring challenges – context

- Crisis context vs normal situation
- Exposure to hazards the same as vulnerability?

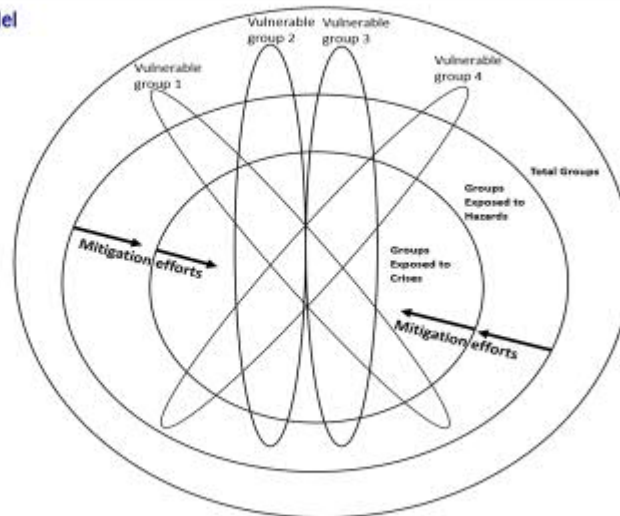
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## Models II

Intersectionality- model  
for D1.6



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## The consequences for quantitative studies

### Validity

- After a crisis vs before a crisis

### Reliability

- National contexts

**Both must be taken into account when choosing variables to describe the phenomena of vulnerability**



## The qualitative consequences

### Validity

- Context sensitivity
- Subjective description
- Pre or post crises studies
- Governmentality aspects of the project

### Reliability

- Governmentality aspects of the study



## Suggestions

Systematic use of the intersectionality perspective to study vulnerability and vulnerable groups, as it is currently neglected with consequent focus on general categories of vulnerability (D1.3 )

### HOW:

- collection of data from 1) official public international and national surveys and data bases; 2) grey literature; 3) scientific literature interaction and exchange
- Mixed methods methodology
- Mixed methods – interweave

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THANK YOU

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## Appendix 3: Kati Orru, University of Tartu – Estonia: *Addressing individual and group vulnerabilities in crisis management*



### Addressing individual and group vulnerabilities in crisis management

  
Kati Orru  
University of Tartu, Estonia  
Kati.Orru@ut.ee



### Vulnerabilities to crises: interpretations and responses by crisis management

#### Varied definitions of vulnerability

- Exposure to hazards and the ability to cope with impacts
- Object of vulnerability
- Social vulnerability depending on personal capacities OR on social conditions and situation

#### Whose responsibility is to reduce vulnerability?

- Lack of or unclear support structures
- overburdened capacities and support gaps

Few case studies (in Nordic countries Räsänen, 2020; Rapeli, 2018)

#### Gap in knowledge

how vulnerability is viewed and translated into action by the institutions involved in crisis management in various countries.

Better understanding about the different approaches to vulnerability helps to identify gaps in support structures and reasons for currently problematic structures.

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## What are the interpretations and practices in responding to vulnerabilities in crisis management in Europe?

### Methods

Common study protocol to analyse the functioning of crisis management in Belgium, Estonia, Finland, Germany, Hungary, Italy, Norway, Sweden

Document analysis and 95 interviews with practitioners from different governance levels conducted in September 2019-January 2020

### Questions addressed:

#### Object of vulnerability

- Static or dynamic status

#### Shaping factors

- Power relations, economic and social security, institutional support

#### Who is responsible?

- Ways of handling vulnerability



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## Findings on addressing vulnerability

### Interpretations

Social vulnerability is overshadowed by focus on vulnerability of infrastructures and societal institutions

Varied interpretations in different institutions, fields within countries

Often instead of vulnerability term 'fragile', 'people with special needs' or 'disadvantaged groups' are used

Individual vulnerability is conceptualised primarily related to personal capacities and social conditions (poverty)

### Practice

Social and cultural diversity rarely acknowledged in crisis management (except in communications)

No comprehensive conceptual/methodological framework for assessing individual vulnerability

Vulnerability assessments only carried out in certain risk areas

Municipal level tasked with responding to the needs of the vulnerable (with little guidance on how to systematically fulfil that duty)

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## Conclusions

- Limited addressing of individual vulnerabilities; except Nordic countries, Belgium and certain crises (climate extremes)
- Patchy understanding about how vulnerable groups may be identified
- Issues of partial, irregular or outdated vulnerability assessments
- Unclear implications of pointing out vulnerable groups

### Areas of development

- Need for coordinated efforts between local authorities, services and sectors
- Need for guidelines on how to use the vulnerability assessment and implement specific measures to deal with vulnerable individuals



## Appendix 4. Sten Torpan, University of Tartu - Estonia: *Institutional rules, practices and experiences in handling misinformation in disaster management*



### Handling false information in emergency management: a cross-country comparative analysis

Sten Torpan  
University of Tartu, Estonia  
Sten.Torpan@ut.ee



### Cross-country analysis of crisis management

#### Research gap

Practices of handling false information in emergency management have not been studied thoroughly enough to draw conclusions about vulnerability in the context of institutional communication in Europe. There is a need to examine practices of handling false information in the emergency management systems of Europe.

#### What to do then?

Exploration of definitions and comprehension of false information helps to analyse how different institutions concerned with crisis management conceptualise misinformation.

We examine how misinformation is being consumed, interpreted and acted upon.

We also shed light on the past experiences where misinformation has hampered crisis communication in the emergency management systems of eight European countries (Germany, Italy, Hungary, Norway, Sweden, Finland, Belgium and Estonia). Particular country cases are highlighted in this instance.

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## Cross-country analysis of crisis management

### Research question

What are the rules, practices and experiences in defining false information and responding to false information?

### Methods

Study protocol (D2.1) to analyse false information related practices crisis management in Belgium, Estonia, Finland, Germany, Hungary, Italy, Norway, Sweden

Document analysis and 90 interviews with practitioners from different levels conducted in September 2019-January 2020

### Contribution

New insights as to how misinformation is defined and tackled by crisis managers leads to better preparedness and responses to crises by institutions as well as the members of public

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## Cross-country analysis of crisis management

### Countrycases

- **Drinking water contamination in Nousiainen, Finland**
- **Terrorist attack on government building in Oslo and at the island of Utøya, Norway**
- **Increase in asylum seekers in 2015 in Sweden**
- **Terrorist attack on Brussels airport and metro**
- **Critical infrastructure failures in Southern Estonia**
- **Flood disaster in Germany in June 2013**
- **Snowstorm in Hungary in March 2013**
- **Earthquake in L'Aquila, Italy, in April 2009**

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## Conclusions on addressing false information

### Results

#### Definitions

Not officially defined (yet); mentions in contexts; general comprehension of the concept; opposites

#### Practices (responses)

Loosely vs strictly organised; centralised vs decentralised management; formal guidelines; campaigns

#### Experiences and vulnerability mechanism

Vulnerability due to action vs inaction; natural vs technical crises

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## Conclusions on addressing false information

### Key takeaway

- False information tackling practises vary among countries considerably
- False information was mainly caused by the lack of timely officially confirmed information

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## Appendix 5. Jaana Keränen, VTT - Finland: *Linkages between risk awareness, social capital and vulnerability at national level*



**Linkages between risk awareness, social capital and vulnerability at national level**  
**First BuildERS on-line colloquium**  
**9.6.2020, 9:00-12:00**

Jaana Keränen, VTT



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### Content of the presentation

- Background information
- Risk awareness
- Social capital
- Vulnerability
- Vulnerable groups based on Finnish case studies

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## Background information

- High level of trust in authorities, political and legal system as well as each other's
- 87% of Finnish people feel that Finland is a safe country (SPEK 2019)
- Equality in income distribution, high level of transparency, high level of gender equality (OECD 2020, CPI 2018, GGGR 2018)
- The level of risk of poverty or exclusion clearly lower than the European average
  - At risk young adults and over 75 years of age
- Challenges: Age of population is increasing fast, Finnish society becomes more diverse/ also negative differences grow

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## UNDRR risk index



	Score	Rank	World
UNDRR	2.05	190	230/244
Resilient	2.35	190	230/244
Vulnerability	1.75	154	230/244
Disaster Response	1.48	164	230/244



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## Risk awareness

- **National risk assessment (Finnish Ministry of Interior 2019), major risks to functional capacity of the population and services**
- Political, financial and military pressure
- Major disruption in power supply
- Severe disruptions in communications networks and services
- Pandemic influenza or similar widespread epidemic
- Nuclear power plant accident in Finland or Finland's neighbouring areas
- **Regional risk assessments are not always public**
- **Weather and climate risks in Finland has assessed**
- Heatwaves, high flood, extensive long-term disruption of power supply
- Further research is needed impacts on different groups of people and business areas

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## Risk awareness

- **Few cities have made surveys on how safe/secure citizens feel their living environment and city centres**
- **National victim of crime survey looks at respondents' experience of violence and fear of being a victim of violence**
- **SPEK has studied citizens' perception of security/safety and sense of security/safety**
- **Experience of violence and sense of security does not always meet**
- **Citizens' preparedness for different extreme event**
- SPEK 72h, Preparedness recommendations for households
- Urban areas vs. rural areas

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## Social capital

- Social relationships between people or groups, i.e. social networks and trust, reciprocity and social support (THL)
- The components of welfare: health, prosperity and perceived quality of life
- The welfare of the community
- Housing conditions and environment, employment and working conditions, income
- The welfare of the individual
- Social relationships, self-realization, happiness, **social capital**

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## Social capital

- Strong belief in getting help from others like close relatives in crisis (especially women and the young, SPEK 2019)
- Experiences on accidents and crimes and financial difficulties are linked to the opinions of security of society
- In general, trust in people's goodwill is high among people who get along well
- Volunteering is wide in Finland, and its importance for well-being is widely recognized (KKV 2014)
- Without the support of third sector, the authorities would not be able to cope with all security-related threats (VN TEAS 2017)

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## Vulnerability

- In general, vulnerability as a term is quite little used
- Not in Finnish strategic security documents or in Vocabulary of comprehensive security
- Used to describe the sectors of vital functions which may be under threat
- Exposure to a security threat, infrastructures like electronic infrastructure and logistics systems (HVK)
- IPCC's framework for risks related to climate change
- Social vulnerability is used in climate-based vulnerability study made in Helsinki region

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## Vulnerable groups

- Vulnerable groups in Finland (discussions with SPEK researchers)
- Elderly
- 20-24 years of old and not in education, employment or training (NEETs)
- Poor people
- Homeless people
- Undocumented migrants

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## Finnish case studies

- **Heavy snowfall; November 2015, December 2017 – January 2018**

<u>Vulnerable groups</u>	<u>Vulnerability elements</u>
<i>Elderly</i>	Dependence on electrically-powered health-related devices
<i>Elderly in residential care homes</i>	Type of house
<i>Families with children</i>	Age
<i>Hospitalised patients</i>	Health conditions
<i>Farm entrepreneurs</i>	Exposure
<i>Households in blocks of flats without fire places</i>	

- **Water contamination; November 2007, January 2017**

<u>Vulnerable groups</u>	<u>Vulnerability elements</u>
<i>Children</i>	Age
<i>Elderly</i>	Reduced health
<i>Patients of the local hospital</i>	Poor health conditions
<i>Marginalised people</i>	Social exclusion
<i>Dementia sufferers</i>	
<i>Residents in the affected area</i>	
<i>Health-care personnel</i>	

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## Finnish case studies

- **Heat waves; 2003, 2010, 2018**

<u>Vulnerable groups</u>	<u>Vulnerability elements</u>
<i>People living in houses with large windows</i>	Age
<i>People living in houses without the possibility of adequate cooling</i>	Reduced health
<i>Elderly</i>	

- **Radicalisation; 18 August 2017**

<u>Vulnerable groups</u>	<u>Vulnerability elements</u>
<i>The whole Finnish society</i>	Exposure

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**Thank you!**

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## Appendix 6: The first BuildERS colloquium invitation

Interested in hearing the H2020 [BuildERS project's](#) findings and discussing over a Gotomeeting? Join us!!

**Tuesday 9 June 2020 09:00 – 12:00 CET**

The H2020 BuildERS (Building European Communities' Resilience and Social Capital) project is celebrating its first year with a Go to-meeting!

VTT Technical Research Centre of Finland runs the project together with partners from 9 countries (Belgium, Estonia, Germany, Hungary, Indonesia, Italy, Norway, Sweden, USA).

BuildERS main goal is to bring local, national and international governance levels together for more effective resilience and for stronger social capital in the face of increasingly complex crises and disasters to provide policy recommendations for supporting vulnerable groups. The project studies challenges related to risk awareness and social trust; contributes to a better understanding of national institutional settings and capacities to face crises and disasters; assesses tools, processes and methods to enhance resilience, social capital and coping skills also via technological innovations.

### **Agenda for the meeting:**

Introduction by VTT coordinator Anna-Mari Heikkila and launch of BuildERS promotion video. This webinar is moderated by professor Pekka Leviäkangas, University of Oulu, Finland.

1. Presentation 1 by Claudia Morsut University of Stavanger – Norway: *The conceptual approach of BuildERS* - synthesises the results of WP1 about the construction of BuildERS theoretical framework on how risk awareness, risk perception, social capital, vulnerability are connected to the overall work of resilience building.
2. Presentation 2 by Christian Kuran University of Stavanger – Norway: *Challenges in measuring vulnerability* - introduces a challenge encountered during the first year of implementation of the project, namely how to measure vulnerability looking at national and cross national surveys as primary sources.
3. Presentation 3 by Kati Orru University of Tartu – Estonia: *Addressing individual and group vulnerabilities in crisis management* - offers insights from eight countries from the BuildERS' consortium and looks at how they deal with vulnerable groups in crisis management.
4. Presentation 4 by Sten Torpan, University of Tartu - Estonia: *Institutional rules, practices and experiences in handling misinformation in disaster management* - presents findings on the responses to various forms of misinformation in crisis and disasters in a sample of BuildERS' consortium countries.
5. Presentation 5 by Jaana Keränen, VTT - Finland: *Linkages between risk awareness, social capital and vulnerability at national level* - clarifies findings of vulnerability and vulnerable groups in past crises and disasters in the Finnish context.

Wrapping up and conclusion



**Please register via link below to this event:**

[Click here to register](#)

*Practicalities:*

Each presentation will last 10 minutes and then participants have time to ask questions. We advise you to use the chat tool either to signalise that you would like to raise questions/comments or to write directly your questions/comments. Welcome!



## Appendix 7: Registered for the colloquium

The first BuildERS colloquium assembled 37 registered participants. Table below shows the organisations from which the participants came from.

Table 1. Organisations participated in the colloquium

Organisation	Country
Civil Protection Department	Italy
CSID Universitas Indonesia	Indonesia
Fraunhofer Institute	Germany
Emergency Services Academy Finland	Finland
Police University College	Finland
Positium	Estonia
Resilience Advisors Network	UK
Stockholm Environment Institute	Sweden
Tampere University	Finland
The Salvation Army	Belgium
UIC	France
University of Jyväskylä	Finland
University of Melbourne	Australia
University of Oulu	Finland
University of Stavanger	Norway
University of Tartu	Estonia
University of Tehran	Iran
University of Tokyo	Japan
University of Trento	Italy
VTT Technical Research Centre of Finland	Finland
Tlali Management Consulting	not known





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