

IMPROVED RISK EVALUATION AND IMPLEMENTATION OF RESILIENCE CONCEPTS TO CRITICAL INFRASTRUCTURE

Dissemination plan

Fanny Guay¹

1. DBI, Danish Institute of Fire and Security Technology.

Deliverable Number: D7.1

Date of delivery: 30 November, 2015

Month of delivery: M6



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 653390

Coordinator: David Lange at SP Sveriges Tekniska Forskningsinstitut

(SP Technical Research Institute of Sweden)

Executive Summary

IMPROVER is a Horizon 2020 project focusing on how to improve European critical infrastructure resilience to crises and disasters through the implementation of resilience concepts to real life examples of pan-European significance, including cross-border examples.

The project will develop methodologies for the implementation of societal, organisational and technological resilience concepts to critical infrastructure. It will be based upon an assessment of risk evaluation techniques and a review of the positive impact of different resilience concepts on critical infrastructure.

The findings from the project will be disseminated to relevant stakeholders throughout the duration of the project (the next three years). We envisage that this will be a dynamic document; that is to say that our goals, strategies and tools outlined below may be subject to change over the duration of the project and we remain open to alternative ways of publicising and disseminating our results.

Exploitation and training activities will be separate deliverables and will therefore not be discussed in depth in this dissemination plan.

Nomenclature

CEN Comité Européen de Normalisation/ European

Committee for Standardization.

CENELEC European Committee for Electrotechnical

Standardization.

Digital media Any media that are encoded in a machine-

readable format and can be created, viewed, distributed, modified and preserved on

computers.

ETSI European Telecommunications Standards

Institute.

NGO Non-governmental organization.

Social media The collection of software that enables

individuals and communities to gather, communicate, share and in some cases

collaborate or play.1

¹ Boyd, D. (2009). 'Social media is here to stay... now what?' Available at: http://www.danah.org/papers/talks/MSRTechFest2009.html (accessed 24 September 2015).

Table of Contents

Executive Summary			
Nomenclature			
1.	Introduction	5	
2.	Dissemination strategy	5	
2.1	What are the aim and the objectives of the dissemination strategy?	5	
2.2	What information do we want to disseminate?	5	
2.3	Who is our audience?	6	
2.4	How will we disseminate the project's results and raise awareness?	6	
2.5	When will we disseminate this information?	7	
2.6	Conditions for dissemination	7	
2.7	Recording of dissemination activities	7	
3.	Planned dissemination of knowledge	8	
3.1	Description of planned dissemination activities	8	
3.1.1	Participation in conferences and other events	8	
3.1.2	Website	10	
3.1.3	Training	10	
3.1.4	Publications	10	
3.1.5	Journals	11	
3.1.6	Other relevant projects	12	
3.1.7	Network and associated partners	12	
3.2	Responsible persons	13	
4.	Dissemination material	13	
4.1	Logo and Icon	13	
4.2	One-pager and business card	14	
4.3	Newsletter	14	
4.4	Articles, public abstract, conference papers	14	
4.5	Social media	15	
5.	Conclusion	16	

1. Introduction

Over the course of the project, the IMPROVER consortium will be disseminating the results of the project to multiple audiences, via different channels, at different intervals, etc. This is necessary throughout the project for the purposes of raising awareness and inviting debate and comment on the scientific work which is being undertaken, while it is in progress; as well as for the dissemination of the projects deliverables and results to promote uptake and increase impact of the project.

Also, a mainstream dissemination strategy is essential to achieve the highest impact, visibility and credibility as possible. This strategy needs to be answering the following four questions:

- 1. What information do we want to disseminate?
- 2. Who is our audience?
- 3. How will we disseminate the project's results?
- 4. When will we disseminate these results and raise awareness?

2. Dissemination strategy

2.1 What are the aim and the objectives of the dissemination strategy?

The aim of this dissemination strategy is to maximize the impact, visibility and credibility of the project. During the project the focus will be on a combination of continuous dissemination and collaboration with relevant stakeholders to develop methodologies that help improve European critical infrastructure resilience to crises and disasters. These stakeholders are one of several groups that will help us promote the uptake and implementation of the IMPROVER methodologies in critical infrastructure across Europe.

The objectives of the strategy are as follows:

- Design, develop and regularly update a dedicated IMPROVER website.
- Share information about the project and publish its findings via both traditional media (e.g. newsletters, publications, news media coverage) and digital media (e.g. social media sites such as LinkedIn and Twitter)
- Transfer knowledge on critical infrastructure resilience (e.g. through the creation of training materials, educational resources and the organisation of workshops) to first responders, owners/operators of infrastructure facilities and inhabitants in areas near the IMPROVER test sites.
- Support the development of a strategy for the exploitation of the key outcomes of IMPROVER beyond the life of the project.

2.2 What information do we want to disseminate?

The information we want to disseminate includes all public project deliverables, information concerning upcoming events and workshops either put on by IMPROVER or attended by IMPROVER, results from said events/workshops, any other type of publications relevant to the project, etc.

2.3 Who is our audience?

Three main stakeholder groups have been identified for this project. These categories are not exclusive and some organisations may belong to more than one of them:

- Research organisations, such as universities and research institutes. The project's scientific
 results will be disseminated to these organisations for the purposes of promoting uptake of the
 projects results and methods in other projects, as well as providing an opportunity for
 stimulating discussion and peer review of the projects results and activities. This will not only
 strengthen the IMPROVER methodologies, but also will promote further work that builds
 upon the key findings of the project.
- Teaching or training organisations, such as universities and fire and rescue service colleges. In order to ensure uptake and continued use of these methodologies, the results of the project will be used to inform educational programmes for university teaching programs and first responders, such as the ANDROID disaster resilience network.² This will result in the continued use of the projects results and methodologies in the future.
- Critical infrastructure owners, operators and users. These will be targeted to ensure not only the continued use of the projects results, but also the usability of the outcomes of the project following its completion.

Additional stakeholder groups are:

- Public administrations responsible for the planning and implementation of emergency response solutions.
- Emergency management agencies who seek to improve resilience to crises and disasters.
- Assistive agencies such as Non Governmental Organisations (NGOs) (e.g. International Red Cross etc.) that provide specific support to disaster management agencies.
- Standardisation bodies such as CEN, CENELEC and ETSI, which ensure common and appropriate solutions for disaster management and resilience.
- Communities using the hashtag SMEM (social media emergency management).

2.4 How will we disseminate the IMPROVER project results and raise awareness?

The public deliverables and results of the IMPROVER project will be disseminated via the following channels:

- Academic forums, including books, journals, conferences and workshops;
- Open access forums, all of the project partners are committed to open access policies; and will
 archive their publications and reports in green open access forums/journals, or on their own
 institutional repositories. The IMPROVER deliverables and publications will also be archived
 and made available to the public on the project website;
- Media, which may be approached in order to share project results, include popular science magazines and trade magazines e.g. New Scientist, news websites, newspapers, radio and

² The ANDROID disaster resilience network; <u>www.disaster-resilience.net</u>; accessed 11th November 2015

- news broadcasters. Dissemination through these channels will help to increase public awareness of the IMPROVER project and its objectives;
- Promotional materials will be designed to raise awareness of the project without providing significant details of the projects outcomes. These will include a project brochure as well as the project website. Printed promotional material may be distributed at e.g. trade fairs as well as via the projects website;
- Partner networks such as the European Reference Network for Critical Infrastructure Protection (ERNCIP) may be used as both a channel for distribution of the projects printed output as well as to raise awareness of the project. Dissemination via networks can lead to future collaboration as well as greater uptake of the project outputs;
- Digital media platforms e.g. Twitter, blogging, social networks and RSS feeds will be used throughout the project to update interested parties about the project's progress and the publication of deliverables.

A strong branding for the project will be used to ensure recognition of the projects activities. This branding will include templates for documents and reports arising from the projects scientific activities as well as presentation templates and uniform branding of the projects website.

2.5 When will we disseminate this information?

Dissemination will be done continuously throughout the duration of the project. However, the communication strategy (logo, templates, etc.) as well as the website were important to finish at an early stage of the project in order to make information on the project and the partners available.

Early dissemination for the purposes of promotion and review of the projects activities will be carried out while tasks are still ongoing; whereas final dissemination and publication activities will be planned to coincide with the publication of deliverables from the project and the finalisation of significant results.

Partners will attend conferences, throughout the project. A provisional list of conferences, which it may be beneficial for partners to attend, is provided in part 4.1.1.

Expanding the partners' network will also be a relevant activity. Partners will be networking at public events, trade fairs and conferences and will establish and maintain contact with appropriate stakeholders by mail or through the website. Furthermore, they will participate in discussions on LinkedIn and/or Twitter.

2.6 Conditions for dissemination

The approval procedures and IPR management procedures are laid out in the Consortium Agreement.

2.7 Recording of dissemination activities

All partners will be recording their dissemination activities every six months so we always have an updated list of all dissemination activities performed during the project. A template for the recording will be provided by the project Coordinator.

3. Planned dissemination of knowledge

3.1 Description of planned dissemination activities

3.1.1 Participation in conferences and other events

Attendance at and participation in conferences, seminars and workshops will be targeted by the partners throughout the project's duration, in order to inform the stakeholders of the progress of the project and get some feedback/input. A provisional list of relevant conferences is available in table 1 below. This list will be updated at least once a year, in order to be up to date with the relevant conferences and events.

Table 1: Provisional list of Conferences and Events				
Activity	Subject	When and where		
Building innovation 2016	The national institute of building sciences fourth annual conference & expo.	11-15 January 2016, USA		
Climate resilient communities conference 2016	Climate resilient communities' conference will showcase best practice in implementing successful community resilience schemes.	28 January 2016, England		
Critical Infrastructure Protection and Resilience Europe	With much focus on convergence, the CIP track of the programme delivers discussions to review the potential threats to critical infrastructure, smart construction and building in security resilience.	2-3 March 2016, The Hague, Netherlands		
IFIP WG 11.10 CIP 2016	10th Annual IFIP Working Group 11.10 International Conference on Critical Infrastructure Protection	14-16 March 2016, Arlington Virginia, USA		
Critical Infrastructure Symposium 2016	-Social and Economic Resilience -Critical Infrastructure Security and Resilience Education -Evolution of the 21st Century Terrorist Threat -Electrical Power Resilience -Transportation Resilience -unique infrastructure research and projects.	April 3-5, 2016, Charleston USA		

Resilience Canada 2016	Learn about the lessons from recent Canadian disasters and practical solutions that can be applied in the face of increasingly severe and unpredictable events.	26-27 April 2016, Canada
13 th International Conference on Information Systems for Crisis Response and Management	Using social media to build resilience within communities likely to be affected by crises and disasters	22-25 May 2016, Brazil
Risk analysis 2016	10th international conference on risk analysis	25-27 May 2016, Greece
The 7th Global Forum on Urban Resilience and Adaptation	Resilient urban infrastructures, measuring and monitoring urban risks, vulnerability and resilience.	6-8 July 2016, Bonn, Germany
Sustainable city 2016	11th international conference on urban regeneration and sustainability	12-14 July 2016, Spain
17th international planning history conference	History – urbanism – resilience	17-21 July 2016, Netherlands
The 3rd World Congress on resilience	Resilience and culture	August 22-24, 2016, Québec, Canada
6th international disaster and risk conference IDRC Davos 2016	Integrative risk management - towards resilient societies	28 August - 01 September 2016, Switzerland
The 6th international building resilience conference 2016	Building resilience to address the unexpected	7-9 September 2016, Auckland, New Zealand
International conference on sustainable infrastructure 2016	A sustainable future for China, the Asian region and the world	17-19 October 2016, China
CRITIS 2016	11th International Workshop on Critical Information Infrastructures Security	10-12 October 2016, France

3.1.2 Website

The website is a key activity in the dissemination process and was created at the beginning of the project: http://improverproject.eu/

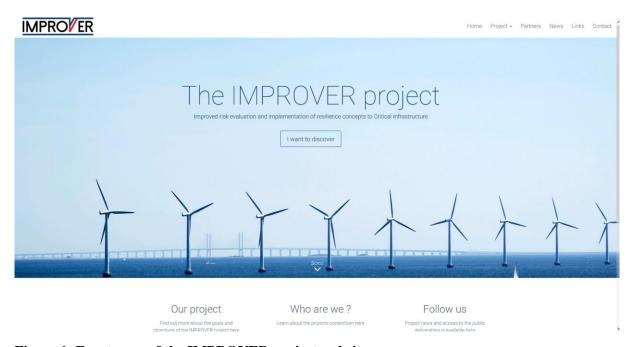


Figure 1: Front page of the IMPROVER project website

The web page main target audience is the general public, so anyone interested in resilience of critical infrastructures can get information on the project. The website includes the project description, results, news, events, publications, and links to other relevant sites. There is also the possibility to contact the consortium and post comments. More details about the features of the website are available in D7.2.

3.1.3 Training

Another important part of the dissemination phase is the training programme. The objective is to transfer knowledge in the fields of incident pre-planning and resilience to large scale incidents (e.g. fires, flooding, antagonistic attacks). This knowledge should be transferred to first responders, emergency managers, and owners/operators of critical infrastructure facilities.

Extensive education and training materials will be developed and reviewed throughout the project. The training material will among other things consist of scenarios which will be made available in an online scenario library.

3.1.4 Publications

The project has yet to produce any publications however reports from workshops, conference papers, and other articles will be published for the duration of the project. All of the project partners are committed to open access policies, and self-archive their publications and reports in green open access forums or on their own institutions repositories. Archiving of the projects results and arising publications will also be undertaken on the projects website as appropriate.

3.1.5 Journals

Journals are for the partners to publish articles or research papers in. A list of relevant journals is available in table 2 below.

Table 2: Provisional list of relevant journals				
Name	Online access			
International Journal of Disaster Resilience in the Built Environment	http://www.emeraldinsight.com/journal/ijdrbe			
Resilience International Policies, Practices and Discourses	http://www.tandfonline.com/action/journalInformation?show=aimsScope&journalCode=resi20#.VidHQ_7smgQ			
International Journal of Disaster Risk Reduction	http://www.journals.elsevier.com/international-journal-of-disaster- risk-reduction/			
International Journal of Emergency Management	http://www.inderscience.com/jhome.php?jcode=IJEM			
Resilience: A Journal of the Environmental Humanities	http://www.jstor.org/page/journal/resilience/about.html			
Disaster Prevention and Management	http://www.emeraldinsight.com/journal/dpm			
Risk Management	http://www.palgrave-journals.com/rm/index.html			
International Journal of Disaster Risk Science	http://www.springer.com/earth+sciences+and+geography/natural+hazards/journal/13753			
Natural Hazards	http://link.springer.com/journal/11069			
International Journal of Critical Infrastructure Protection	http://www.journals.elsevier.com/international-journal-of-critical-infrastructure-protection/			
Reliability Engineering & System Safety	http://www.journals.elsevier.com/reliability-engineering-and-system-safety/			
International Journal of Critical Infrastructures	http://www.inderscience.com/jhome.php?jcode=ijcis			

International Journal of Business Continuity and Risk Management	http://www.inderscience.com/jhome.php?jcode=IJBCRM
International Journal of Risk Assessment and Management	http://www.inderscience.com/jhome.php?jcode=ijram
International Journal of Sustainable Civil Engineering	http://serialsjournals.com/journal-detail.php?journals_id=52
Restoration & Remediation Magazine	http://www.randrmagonline.com/
Environmental Hazards: Human and Policy Dimensions	https://ejournalscambridge.wordpress.com/2014/03/07/environmental -hazards-human-and-policy-dimensions/

3.1.6 Other relevant projects

It is important to seek and maintain an interaction with other relevant projects which have been funded under relevant FP7 and Horizon 2020 calls. We are already in touch with several projects such as CIPRNet, RESILENS, SMR, RESOLUTE, and DARWIN. We met with several of these projects in Brussels in September 2015, and agreed to collaborate on deliverables, workshops, and final results. This is intended to prevent duplication of any work planned within the different projects and to promote synergy between the different actions.

Ongoing collaborative activities throughout the project will be sought with the other consortia when possible. In addition to this, the project consortium has included provision for participating in clustering meetings of projects on critical infrastructure protection against natural hazards and cascading effects in crisis situations. Other project in related areas might also be interesting for us, for example, the FP7 project RAMSES, working on sustainable cities, might have relevant inputs for our work.

In order to facilitate these activities, the project consortium has the possibility to collaborate with several partners throughout a number of ongoing projects; for example SP are the coordinators of the CascEff project (SEC-2013.4.1-2), in which INERIS and the University of Sheffield are partners; the JRC are partners in the DRIVER project (SEC-2013.4.1-1), the CIPRNet project (SEC-2012.7.4-2), as well as leaders of the ERNCIP network.

3.1.7 Network and associated partners

Each partner will be responsible for involving and informing their relevant contacts and network about the project. The project will also give the consortium the opportunity to expand their existing networks, by attending meetings, workshops and conferences.

By looking into previous EU projects and/or projects related to the project, it is possible to get in touch with previous participants/ stakeholders. Universities, who have a research interest that is suitable as well as other public administration, emergency management services and standardisation bodies around the EU area can be contacted.

Our associated partners in the projects are both a target audience and a tool for dissemination. First, the associated partners will be a target audience, has they will benefit from the results of the project. But they will also be active participants, as they will be providing inputs to our international survey and be pilot cases for the demonstration activities. Associated partners are:

- Five infrastructure users / owners / operators (FDO danske olieberedskabslagare, the city of Malmö, A/S Norske Shell, port of Oslo, SANEF a French motorway operator)
- One civil contingencies / protection agency (DSB)
- Two rescue agencies (the Danish Red Cross, Foreningen af Kommunale Beredskabschefer the union of municipalities fire chiefs of Denmark)
- Three universities, of which two are from outside of Europe (OTH Regensburg; Michigan State University and the University of Queensland)

3.2 Responsible persons

Persons responsible for the selection of media and the successful dissemination of the projects results are primarily those responsible for the individual deliverables and tasks within the project. However, the IMPROVER exploitation board may make recommendations for alternative channels of delivery.

4. Dissemination material

4.1 Logo and Icon

The IMPROVER logo and icon can be used for project publications, templates and for the website. Its size can vary, depending on what it is used for, but the colour will always stay the same: black, blue and red.



Figure 2: IMPROVER Logo



Figure 3: IMPROVER Icon

There are specific guidelines for a project funded by the EU grant. Any infrastructure, equipment and major results must display the EU emblem, as seen below and include the following text:

For communication activities: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 653390."



Figure 4: The EU emblem

4.2 One-pager and business card

We will be developing a one-pager, summarising key information about the project (similar to a flyer, but in a post card format). This will be developed before the end of 2015, and shared with all partners, so that they can be distributed to audiences attending IMPROVER dissemination activities, but also when IMPROVER partners are attending events. It will be a great opportunity to raise the awareness around the project.

A small business card containing the contact information of a partner and a small summary of the project will also be created for partners to use at conferences and workshops.

4.3 Newsletter

We will produce newsletters 2 to 4 times a year to update our associated partners and the general public about the progress of the project, the events we will attend or organize and pieces of relevant research we want to share. A template for this newsletter will be created by the end of 2015 and we plan to have the first number out in the first trimester of 2016. All newsletters will be distributed to the associated partners and other relevant stakeholders, as well as published on the website and on LinkedIn. The newsletters will also be promoted via Twitter and other social media.

4.4 Articles, public abstract, conference papers

All partners are encouraged to work on articles, public abstracts, conference papers, reports, posters or any other type of publication that promotes the project. There is no specific template for this activity as one usually gets directives from the events' organizers on which template to use. However, partners are encouraged to share details of these activities with other members of the consortium to share best practices, and also to ensure that there are no IPR and/or confidentiality issues.

³AGA - Annotated Model Grant Agreement: H2020 General MGA: V2.0.1–12.05.2015, page 237, available online on: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf#page=237

4.5 Social media

The project will use social media (especially Twitter and LinkedIn) to publicise IMPROVER deliverables and dissemination activities to key stakeholders and members of the public throughout the duration of the project.

LinkedIn is a platform most often used for business-to-business communication and to create a professional image for both individuals and corporations. It has been increasingly important for emergency management professionals and we will seek to use this site to engage these stakeholders with the project deliverables. The project LinkedIn page is already active and has 46 followers.

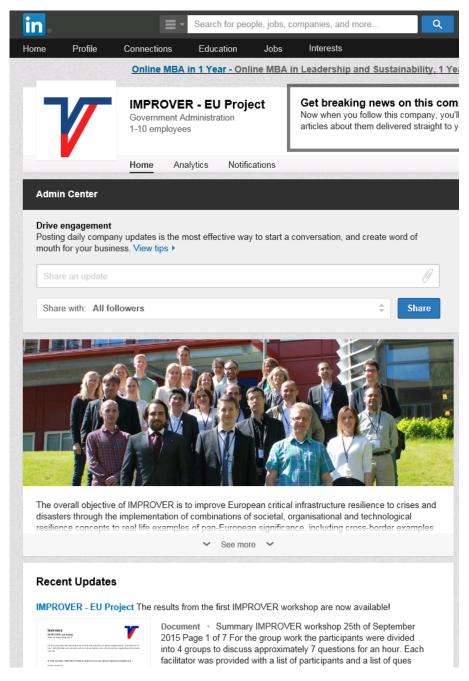


Figure 5: IMPROVER LinkedIn page

Twitter is a more conversational and informal platform compared to LinkedIn. It is also widely perceived as the most 'public' social media site with citizens using it to follow breaking news stories as they unfold. Our strategy will involve the targeting of influential Twitter users (or tweeps) from relevant sectors including emergency management professionals, critical infrastructure providers, citizen and professional journalists, and members of the public in European countries that may have an interest in the project. The Sheffield team will also provide guidance on how to use social media to maximise public engagement with IMPROVER.

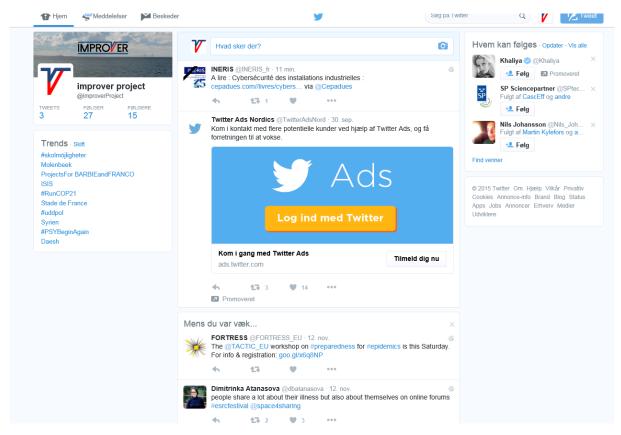


Figure 6: IMPROVER Twitter page

5. Conclusion

In conclusion, the IMPROVER project dissemination strategy employs a vast range of different ways in which to communicate about the project, ranging from digital media with a website and a LinkedIn account, to direct in person contact by attending conferences and events.

The IMPROVER project partners will be implementing this strategy for the entire duration of the project and beyond.