

Aligning the resilience-related research efforts in the EU-DRS projects

Joint Workshop DRS-7&14 projects
Brussels, September 13–14, 2017



Aleksandar Jovanovic, Emanuele Bellini (Eds.)



Aleksandar Jovanovic, Emanuele Bellini (Eds.)
Aligning the resilience-related research efforts in the EU-DRS projects

Aleksandar Jovanovic, Emanuele Bellini (Eds.)

Aligning the resilience-related research efforts in the EU-DRS projects

Joint Workshop DRS-7&14 projects
Brussels, September 13–14, 2017





Contact

European Virtual Institute for Integrated Risk Management (EU-VRI) EWIV

Visiting address:

Lange Str. 54,
70174 Stuttgart
Germany

Tel: +49 711 410041 29

Fax: +49 711 410041 24

info@eu-vri.eu

www.eu-vri.eu

Acknowledgments

The Support of the European Commission provided for EU Projects DARWIN, RESILENS, SmartResilience, IMPROVER, RESOLUTE and SMR is gladly acknowledged here, as well as a direct support in providing the venue and facilities for the workshop.

Imprint

© 2017 Steinbeis-Edition

All rights reserved. No part of this book may be reprinted, reproduced, or utilised in any form by any electronic, mechanical, or other means now known or hereafter invented, including photocopying, microfilming, and recording or in any information storage or retrieval system without written permission from the publisher.

Aleksandar Jovanovic, Emanuele Bellini (Eds.)

Aligning the resilience-related research efforts in the EU-DRS projects

Joint Workshop DRS-7&14 projects | Brussels, September 13–14, 2017

1st edition, 2017 | Steinbeis-Edition, Stuttgart

ISBN 978-3-95663-143-6

Layout: European Virtual Institute for Integrated Risk Management (EU-VRI) EWIV

Cover picture: arka38/shutterstock.com

Steinbeis is an international service provider in entrepreneurial knowledge and technology transfer. The Steinbeis Transfer Network is made up of about 1,000 enterprises. Specialized in chosen areas, Steinbeis Enterprises' portfolio of services covers research and development; consulting and expert reports as well as training and employee development for every sector of technology and management. Steinbeis Enterprises are frequently based at research institutions, especially universities, which are constituting the Network's primary sources of expertise. The Steinbeis Network comprises around 6,000 experts committed to practical transfer between academia and industry. Founded in 1971, the Steinbeis-Stiftung is the umbrella organization of the Steinbeis Transfer Network. It is headquartered in Stuttgart, Germany. Steinbeis-Edition publishes selected works mirroring the scope of the Steinbeis Network expertise.

198138-2017-10 | www.steinbeis-edition.de



Preface

Joint Workshop DRS-7&14 projects: ALIGNING THE RESILIENCE-RELATED RESEARCH EFFORTS IN THE EU DRS PROJECTS

Brussels, Belgium, September 13-14, 2017

This Joint Workshop DRS-7&14 projects entitled “Aligning the resilience-related research efforts in the EU DRS projects” takes place in conjunction with the Community of Users Meeting of September 12, 2017. The main issue tackled at the workshop is simple: new approaches to the resilience assessment and management methods, new guidelines and new tools are being developed in many current EU projects. Obviously, these development efforts should be consistent and aligned, but it is often not easy to achieve this goal in practice - this workshop should help in this sense.

The Workshop intends to go beyond simple presentations of project results. It will include intensive exchange of opinions, confronting the ideas, identifying clearly the pros and cons of different approaches and highlighting paths and opportunities for integration of results from different DRS projects. The Workshop involves over 150 practitioners, developers and decisions makers eager to find the best way to harmonize, integrate and enhance the project outcomes, and achieve tangible impact at the European level. International/global aspects of the successful resilience approaches are tackled, too, mainly thanks to the contributions of the OECD and the US participants. Training courses and an “interaction space”, including project information exhibition booths and the room for perspectivity challenge board games, complete the scope of the workshop.

The workshop and the meetings, will be a unique opportunity to share experience in resilience and risk governance, communication, analysis and management, also by means of person-to-person talks, not only among the projects partners but also among all the interested stakeholders in Europe and worldwide.

Enjoy!

(A. Jovanovic, SmartResilience Project
Coordinator, CEO EU-VRI)

(E. Bellini, Resolute Project Coordinator,
Researcher, University of Florence)



Program Committee

- Emanuele Bellini
- Ivonne Herrera
- William Hynes
- Aleksandar Jovanović
- Stephane Jacobzone
- David Lange
- Paolo Nesi
- Jose Maria Sarriegi

Organization Committee

- Emanuele Bellini
- Aoife Doyle
- Ivonne Herrera
- Aleksandar Jovanović
- Roswitha Kokejl
- Jose Palma-Oliveira
- Katarzyna Tetlak



Table of Contents

Preface	v
Announcement	ix
Program	1
Detailed Agenda.....	5
Abstracts	11
Profiles of Keynote Lecturers and Plenary Panelists	35
Preliminary List of Participants	53
Project Papers.....	61
DARWIN.....	63
IMPROVER	77
RESILENS.....	85
RESOLUTE	97
SmartResilience	105
SMART MATURE RESILIENCE (SMR).....	133
IMG-S - EARTO Joint Position Paper on Resilience in Security Research	141





Announcement

Joint Workshop DRS-7&14 in conjunction with the CoU - Community of Users
(<http://ereg.me/cou-sept-2017>) meeting of Sept. 12, 2017:

Aligning the resilience-related research efforts in the EU-DRS projects

September 13-14, 2017

BAO Congress Centre
rue Félix Hap 11
1040 Brussels, Belgium

Following the initiatives coming from several DRS-projects and support expressed by the European Commission, this joint workshop is organized with the goal to ensure collaboration and alignment among the projects, especially in the areas related to methods, guidelines and tools developed in the projects. The challenges related to aligning experience, findings and lead to research in single project towards a "common approach" will be tackled during this workshop and the possibilities for joint practical actions examined.

The format of the joint workshop will include plenary sessions devoted to alignment of:

- Methods & Guidelines for resilience assessment
- Resilience Indicators
- Tools, operationalization, application
- International/global collaboration in the area of resilience involving international organizations (OECD, EU), ISO and partners from USA

as well as the

- Infobooshs of single projects
- Posters & demonstrations
- Serious gaming (related to resilience)

The registration web-page will contain book of abstracts and presentations (after the workshop).

Program in a nutshell:

Start: September 13, 2017 11:30

- Session 1: Towards the aligned European Resilience Management Guidelines: How to achieve alignment and interoperability?
- Session 2: Resilience assessment and indicators: How to define them? How to monitor them? How to implement them?
- Session 3: Tools and methods for resilience operationalization
- Session 4: Application cases: Where the newly developed methods, guidelines & tools have been implemented / analyzed?
- Session 5: Importance of international/global cooperation in the area of resilience
Final discussion

End: September 14, 2017 14:00

SHORT COURSE:

Indicator-based resilience assessment for critical infrastructures - the Smart Resilience methodology and tools
A. Jovanovic & K. Øien (SmartResilience), F. Petit (ANL)
September 14, 2017 14:00 - 16:30
Max no. of participants: 25 (registration closed)

Program Committee: E. Bellini (RESOLUTE), I. Herrera (DARWIN), W. Hynes (RESILENS), A. Jovanovic (SmartResilience), S. Jacobzone (OECD), D. Lange (IMPROVER), P. Nesi (RESOLUTE), J. M. Sarriegi Domínguez (SMR)

Organization Committee: E. Bellini, A. Doyle, I. Herrera, A. Jovanovic, R. Kokejl, J.M. Palma Oliveira, K. Tetlak



REGISTER HERE:

Register for the Webex - day 1

September 13, 2017

<http://www.smartresilience2.eu-vri.eu/Events/default.aspx?EventID=11389>

Register for the Webex - day 2

September 14, 2017

<http://www.smartresilience2.eu-vri.eu/Events/default.aspx?EventID=11390>

NOTE: Registration for personal attendance has been already closed, please use this links in order to register for online participation via Webex

Contact: K. Tetlak at:
WorkshopResilience2017@eu-vri.eu



www.h2020darwin.eu



www.improverproject.eu



RESILENS

www.resilens.eu



www.resolute-eu.org/



<http://www.smartresilience.eu-vri.eu>



www.smr-project.eu

The projects above have received support from the EU DRS project line - the support is gladly acknowledged

Partners from the EU-DRS projects are specifically invited and encouraged to participate, all other interested Community of Users (CoU) members and external parties are cordially invited. Please, register online (room limitations: 120 participants).

Contact organizers: Ms. K. Tetlak at WorkshopResilience2017@eu-vri.eu

Participation in the workshop and the course is free of charge, but registration is mandatory!





Program

Joint Workshop DRS-7&14 projects: ALIGNING THE RESILIENCE-RELATED RESEARCH EFFORTS IN THE EU DRS PROJECTS

Brussels, Belgium, September 13-14, 2017



Venue:

BAO Congress Centre
rue Félix Hap 11
1040 Brussels,
Belgium

<http://www.bao.be/UK/PageEntreprises.php>

Picture source:

https://lh3.googleusercontent.com/M1T5zZNYWy9eDAm-K-DJl2msGWrfYGuF85GceefnQtyEHZ0Op1vitykm62l_mviW82OLCA=s150

The Resilience Workshop is an excellent opportunity among project partners from different DRS projects to communicate their results to the “outside world” and align further activities related to resilience. It is also an opportunity for interested professionals, not participating in above mentioned projects, to learn about them and their numerous results.

Conference Committee: E. Bellini (RESOLUTE), I. Herrera (DARWIN), W. Hynes (RESILENS), A. Jovanović (SmartResilience), S. Jacobzone (OECD), D. Lange (IMPROVER), P. Nesi (RESOLUTE), J. M. Sarriegi (SMR)



European Virtual Institute for Integrated Risk Management
Brussels 2017

The program of the workshop and its accompanying events comprises:

1. **September 11, 2017**

EU-VRI/ETPIS Meeting

General Assembly, Executive Board