Resilience for Cyber-Physical Energy Systems

Deliverable D1.1

Dissemination Summary

Version 1.0

Deliverable

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CHANGE LOG

Date	Version	Author/Editor	Summary of Changes Made
2022-09-15	v0.1	F. Pröstl Andrén (AIT)	Initial document structure
2025-05-23	v0.2	F. Pröstl Andrén (AIT)	First draft, including publications and workshops
2025-05-26	v1.0	F. Pröstl Andrén (AIT)	Final version

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1 Executive Summary

The digital transformation of energy systems presents both unprecedented opportunities and complex challenges. As energy infrastructures evolve into highly interconnected and intelligent Cyber-Physical Energy Systems (CPES), ensuring their resilience becomes a critical priority. Traditional approaches to resilience, often reliant on over-provisioning and redundancy, are no longer sufficient in the face of increasing system complexity, cyber threats, and the growing integration of renewable energy sources. The RESili8 project addresses this pressing need by developing a comprehensive and innovative resilience solution package tailored for CPES.

RESili8 brings together a consortium of leading European research institutions, industry partners, and service providers to collaboratively design, implement, and validate new methodologies for resilient energy system operation. The project's approach is grounded in AI-driven analysis, sustainable system planning, and continuous validation through lab and pilot demonstrations. These efforts aim to support the green energy transition by enhancing the security of supply and enabling the seamless integration of distributed and renewable energy technologies.

The dissemination strategy of the RESili8 project ensures that the knowledge and innovations generated are effectively shared with a broad spectrum of stakeholders. This includes the scientific community, industry actors, policy makers, and the general public. Dissemination activities are designed not only to inform but also to engage stakeholders in meaningful dialogue, fostering collaboration and feedback that can shape the project's direction and amplify its impact.

This deliverable, D1.1 Dissemination Summary, outlines the strategic framework and concrete actions undertaken to disseminate the project's objectives, progress, and results. It details the multi-channel dissemination approach, including the development of a dedicated project website, participation in scientific conferences and journals, organization of stakeholder workshops, and collaboration with the ERA-Net Knowledge Community. These activities are aligned with the project's overarching goal of maximizing visibility, fostering knowledge exchange, and ensuring the practical relevance of its outcomes.

The document also highlights the project's commitment to scientific excellence and community engagement. By targeting high-impact journals and conferences, RESili8 ensures that its research contributions are rigorously peer-reviewed and widely disseminated. Simultaneously, the project's stakeholder workshops and webinars provide platforms for dialogue with end users, industry representatives, and fellow researchers, ensuring that the solutions developed are grounded in real-world needs and challenges.

In summary, the RESili8 dissemination strategy is a cornerstone of the project's success, enabling it to bridge the gap between research and practice. This deliverable serves as a comprehensive record of the dissemination efforts to date, reflecting the project's dedication to transparency, collaboration, and impact.

2 Introduction

The digital transformation of energy systems presents both unprecedented opportunities and complex challenges. As energy infrastructures evolve into highly interconnected and intelligent Cyber-Physical Energy Systems (CPES), ensuring their resilience becomes a critical priority. Traditional approaches to resilience, often reliant on over-provisioning and redundancy, are no longer sufficient in the face of increasing system complexity, cyber threats, and the growing integration of renewable energy sources. The RESili8 project addresses this pressing need by developing a comprehensive and innovative resilience solution package tailored for CPES.

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A key component of the RESili8 project is its robust dissemination strategy, which ensures that the knowledge and innovations generated are effectively shared with a broad spectrum of stakeholders. This includes the scientific community, industry actors, policy makers, and the general public. Dissemination activities are designed not only to inform but also to engage stakeholders in meaningful dialogue, fostering collaboration and feedback that can shape the project's direction and amplify its impact.

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3 Target Audience and Objectives

The overall objective of the dissemination activities was to spread the project results among the scientific community, as well as key industry players, potential end-users, and the general public. Furthermore, a key aim was to facilitate engagement with the variety of stakeholders in the smart grid ecosystem.

The dissemination activities of the RESili8 project had a broad target audience, including:

- Research communities in the smart grids and power systems area, as well as in security and communication -– resilient smart grids is a multidisciplinary endeavour, and as such, the aim in the project was to target as broad a research community as possible.
- Related European and national projects — regular exchange was done with a number of related research projects, some within the same ERA-Net call and others on national levels, which investigated similar aspects of smart grids.
- Industry organisations — the RESili8 consortium contains a number of high-profile industry organisations, which are perfectly placed to disseminate the project's results to various industry fora.
- Service providers — the RESili8 project has with the DSO Wiener Netze a service provider within the project consortium that can help to target our dissemination activities and to give the results from the project visibility towards other service providers.
- End users and end user organisations -– of course, any of the solutions the project will develop should be acceptable to smart grid's end users. This is especially the case when considering important privacy issues and the economic impact of deploying security measures. With the annual stakeholder workshops in RESili8, members of end users were invited to participate in the discussions on these topics.

Some specific dissemination objectives included:

- Annual stakeholder engagement workshops to gather requirement from different stakeholders and to regularly discuss the results of the RESili8 project.
- Disseminating the projects results in high-quality and high-impact workshops, conferences and journals, in order to improve the quality of the project's results via the peer-review process and to influence and inform the scientific and industrial community debate.
- Maximise the project's impact and avoid duplication of research effort by engaging with related European and national research projects.
- Develop an online presence for the project, thus ensuring a visibility of the project also outside the core scientific community.

In the dissemination activities that were carried out during the project these goals tried to be met as well as possible, although some deviations may occur.

4 Strategy for General Dissemination

4.1 Project Website

In order to disseminate the project's objectives, ongoing activities, and its results to a wide audience, a project website was published, which can be reached via the address www.resili8-project.eu.

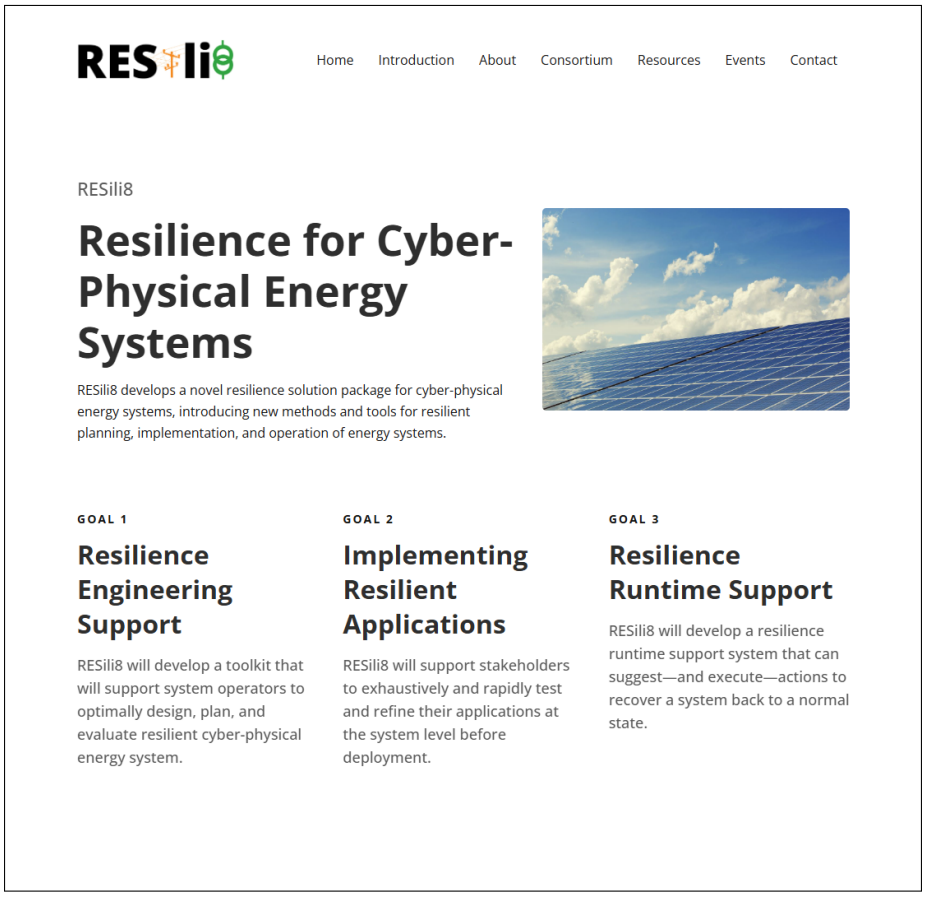

Figure 1: The homepage of the RESili8 website: www.resili8-project.eu

The content on the website is targeted to a wide audience, including those with a general interest in the project, subject specialists and the ERA-Net community. Furthermore, it acts as information platform for the project's stakeholder group. As shown in Figure 1 the website is organised in tabs that convey the following information:

- Home/Introduction – this is the homepage and provides a short abstract and the main goals of the project.
- About – this page gives the visitor a longer description of the project as well as some project facts, such as budget and duration.
- Consortium – an outline of the RESili8 consortium.
- Resources – publicly available deliverables are published here.
- Contact – contact information to get in contact with the coordinator is provided.

4.2 Stakeholder Engagement Workshops

The RESili8 consortium organised annual stakeholder engagement workshops with the primary goals to engage with the stakeholder group and solicit feedback and requirements from them, to exhibit the project's results, and to raise awareness of the issues around the topic of resilience for cyber-physical energy systems. These workshops were also intended to be the primary means that organizations outside the consortium were involved in the project.

5 Strategy for Scientific Dissemination

To achieve an ambitious and progressive scientific dissemination that reflects the maturity of the project's results and aims to support the highest possible visibility of the project, several stages where considered:

- Stage One -– the project is disseminated at relevant workshops and conferences via the organisation of panel sessions and scientific posters, and whenever possible via invited presentations.
- Stage Two — early results and outlines of our intended research activities are published in so-called position papers and in targeted and high quality scientific workshops, in order to garner early feedback from the scientific community.
- Stage Three -– as the research results from the project matures, we will increasingly target high profile scientific conferences and symposia, in order to disseminate our results to a wide scientific audience.
- Stage Four — the project consortium will target high-impact archival journal outlets with the mature results of their scientific work.

Of course, these stages are intended to be indicative, and the specific nature of the outlet that a set of project partners intends to target was based on their expert judgment. Furthermore, as part of the overall dissemination strategy, when appropriate, the project aimed to publish its work jointly, i.e., with multiple organisations contributing.

5.1 Participation in the ERA-Net Knowledge Community

The aim of the participation in ERA-Net's Knowledge Community in RESili8 was to engage with the ERA-Net community for two main reasons: *(i)* to provide input to the project, e.g., in terms of requirements and related research, to steer the project's research direction; and *(ii)* to disseminate the project results to the community, so they can be leveraged by its stakeholders. Relevant stakeholders for RESili8 are system operators and industrial companies that have an interest in resilience for cyber-physical energy systems.

The participation in the ERA-Net Knowledge Community can be summarized in following subtasks:

- Involvement in formative evaluation – Participation in ERA-Net Smart Energy Systems annual meetings and additional Knowledge Community surveys as well as a review process of the annual reports.
- Crosscutting Knowledge Community activities – Participation in ERA-Net working group meetings as well as provision of intermediate learnings and project results to the Living Documents and in the Knowledge Sharing Platform. This task also contains the cooperation with other related ERA-Net projects.
- Deliverables to the ERA-Net Smart Energy Systems initiative – Preparation of the annual ERA-Net reports as well as a final report.

5.2 Workshop, Conferences, Journals, and Magazines

The dissemination plan was continuously developed and adapted throughout the project and also depending on the current work and work package. At the beginning of the project, the activities were especially focused on the following:

- Publication of scientifically relevant papers and articles in journals of stakeholders or scientific journals, such as
  - IEEE Transactions on Smart Grid, IEEE Transactions on Control Systems Technology, Control Engineering Practice, Automatica, Electric Power Systems Research, Energies, Applied Sciences, Journal of Machine Learning Research
- Publication and presentation of minimum two papers per year in the course of national and international scientific conferences, such as
  - IEEE Conference of Decision and Control, American Control Conference, European Control Conference, Power Systems Computation Conference, International Conference on Electricity Distribution (CIRED), CIGRE Session (major international electricity conference), Transmission & Distribution Conference (DistribuTECH), IEEE Conference on Innovative Smart Grids Technologies Europe (ISGT Europe), IEEE International Conference on Smart Grid Communications (SmartGridCom), IEEE Power and Energy Society General Meeting (PES GM), Annual Conference of the IEEE Industrial Electronics Society (IECON)
- Presentation of the project results in innovation and industry groups (e.g. Euroheat & Power, ETIP SNET, IEA Annexes).
- Publication of project deliverables and highlighting key results e.g. via press releases and success stories
- Organization of targeted national and international workshops:
  - Organization of 2-3 conference workshops where external participants are invited to submit papers on the same topic and related to RESili8
- Participation in appropriate national and international events. Preparation of press releases and similar PR activities around these events (conferences, etc.)
  - Mission Innovation Austria Week
  - Digitalize in Stockholm
- Teaching of concepts for smart energy systems and solutions will be realized by integrating project-related contents in Bachelor and Master-level courses at KTH and TUE

6 Dissemination Activities

In this section we report on the dissemination activities that were carried out since beginning of the RESili8 project. The dissemination activities are structured into general dissemination including online activities via the RESili8 website, dissemination through the ERA-Net Knowledge Community, and scientific dissemination of publications and presentations at international conferences, lectures and student theses related to RESili8, and summaries of the three stakeholder workshops that were carried out.

6.1 General Dissemination

The project website was created shortly after the start of the project. The website contains information about the project and the consortium. Furthermore, there is a contact form where interested parties can ask for more information or on how they can get involved in the project. It can be found under the URL www.resili8-project.eu/. In Figure 2 the visitation statistics for the website are shown.

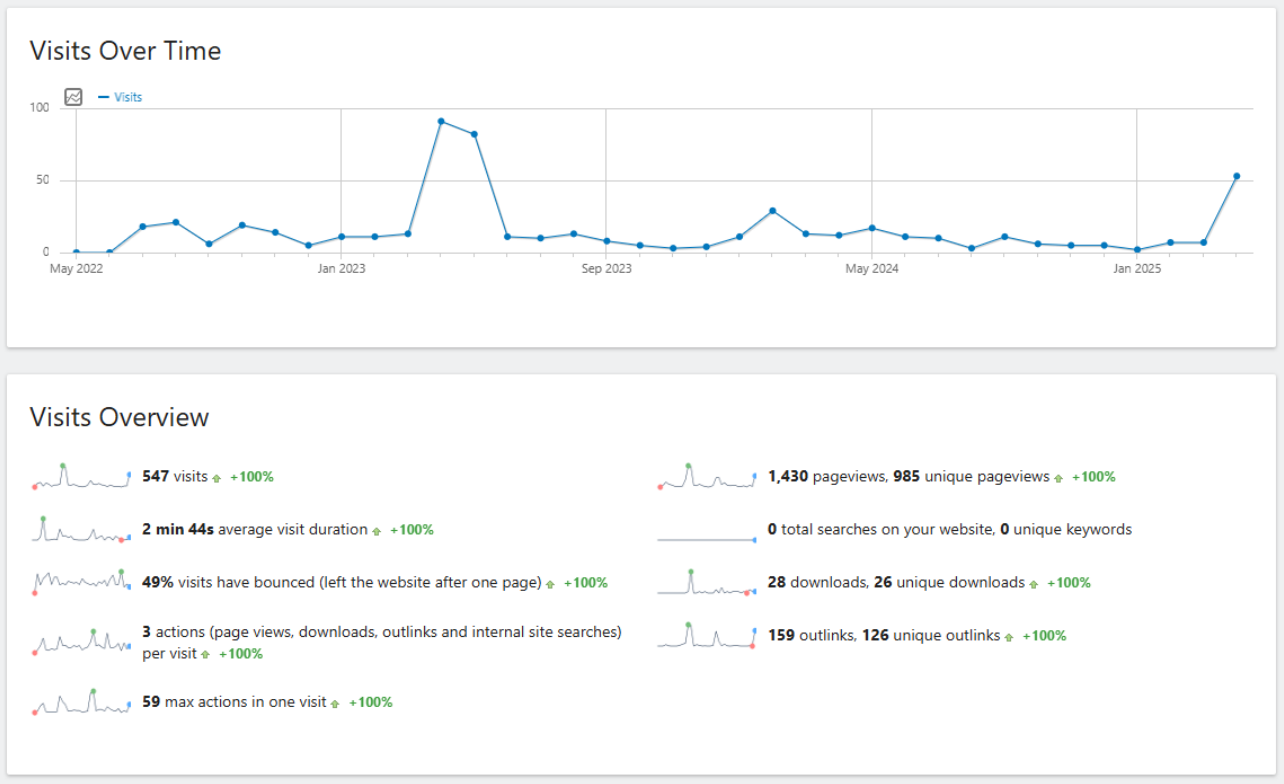

Figure 2: Statistics on visits to the RESili8 web page.

6.2 ERA-Net Knowledge Community Meetings

The RESili8 project has engaged with the knowledge community throughout the lifetime of the project in numerous ways. Members of the consortium have attended several online knowledge community meetings. At these meetings, consortium members have sought to contribute to various working groups, specifically the systems architecture and modelling group. In addition to these contributions, the project has conducted three stakeholder workshops, in which the project goals and results have been discussed. Moreover, members of the ERA-Net knowledge community have been invited and presented their projects at these workshops, to foster collaboration and identify potential synergies. These workshops have proven a great success as means of engaging with a wide variety

of knowledge community members, such as researchers and industry. The positive feedback that was received at the workshops helped to steer the project's research activities and foster potential avenues of exploitation, beyond the end of the project.

6.3 Publications and Presentations at International Conferences

Members of the RESili8 consortium have presented their work and scientific achievements at several international conferences, in the form of papers, presentations, and panel discussions. In total, 10 conference papers and 4 journal papers were published, and 2 additional journal papers were submitted during the project.

The following publications were published at international conferences, workshops, and journals:

- Kin Cheong Sou and Henrik Sandberg. Resilient Scheduling of Control Software Updates in Power Distribution Systems. In *2022 IEEE 61st Conference on Decision and Control (CDC)*, pages 6146–6153, 2022. doi: 10.1109/CDC51059.2022.9993270
- Eric M. S. P. Veith, Arlena Wellßow, and Mathias Uslar. Learning new attack vectors from misuse cases with deep reinforcement learning. *Frontiers in Energy Research*, Volume 11 - 2023, 2023. ISSN 2296-598X. doi: 10.3389/fenrg.2023.1138446. URL https://www.frontiersin.org/journals/energy-research/articles/10.3389/fenrg.2023.1138446
- Daniel Selvaratnam, Amritam Das, and Henrik Sandberg. Electrical Fault Localisation Over a Distributed Parameter Transmission Line. In *2023 62nd IEEE Conference on Decision and Control (CDC)*, pages 7088–7093, 2023. doi: 10.1109/CDC49753.2023.10383452
- Michelle S. Chong, Masashi Wakaiki, and João P. Hespanha. Memory Saving State-Sharing Multi-Observer for a Class of Multi-Observer-Based Algorithms. *IEEE Control Systems Letters*, 7:1772–1777, 2023. doi: 10.1109/LCSYS.2023.3280079
- Florian Reißner and Michelle S Chong. Secure Control for a Microgrid of VSMs with Virtual Friction. In *2024 European Control Conference (ECC)*, pages 3083–3090, 2024. doi: 10.23919/ECC64448.2024.10590816
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- Anne van der Horst, Michelle S. Chong, Junsoo Kim, and Henrik Sandberg. Resilient Nonlinear State Estimation Using the Median Operation for a Network of Droop-Controlled Power Inverters. In *2024 European Control Conference (ECC)*, pages 3070–3076, 2024. doi: 10.23919/ECC64448.2024.10590750
- Kamil Hassan, Daniel Selvaratnam, and Henrik Sandberg. On Resilience Guarantees by Finite-Time Robust Control Barrier Functions With Application to Power Inverter Networks. *IEEE Open Journal of Control Systems*, 3:497–513, 2024a. doi: 10.1109/OJCSYS.2024.3487408
- Filip Pröstl Andrén, Catalin Gavriluta, Denis Vettoretti, and Marco Mittelsdorf. Automated Cyber-Physical Validation Framework for Rapid Development of Smart Grid Controls. In *IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society*, pages 1–6, 2024. doi: 10.1109/IECON55916.2024.10905248
- Arlena Wellßow, Julian Kohlisch-Posega, Eric M.S.P. Veith, and Mathias Uslar. Threat Modeling for AI Analysis: Towards the Usage of Misuse Case Templates and UML Diagrams for AI Experiment Description and Trajectory Generation. In *Proceedings of the 2024 13th International Conference on Informatics, Environment, Energy and Applications*, IEEA '24, page 7–16,

New York, NY, USA, 2024. Association for Computing Machinery. ISBN 9798400716423. doi: 10.1145/3653912.3653915. URL https://doi.org/10.1145/3653912.3653915

- Kamil Hassan, Denis Vettoretti, Daniel Selvaratnam, Henrik Sandberg, and Filip Prostl Andrén. Resilient Power Inverter Network: A Hardware-in-the-Loop Simulation Case Study. In *IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society*, pages 1–8, 2024b. doi: 10.1109/IECON55916.2024.10905863
- Arlena Wellßow and Eric MSP Veith. Power Switch: Online vs. Offline Learning in the Energy Domain. In *Proceedings of the 38th annual European Simulation and Modelling Conference (ESM'2024)*, 2024
- Arlena Wellßow, Paul Smith, Edmund Widl, Eric Veith, Julian Kohlisch-Posega, Francesca Soro, Malte Puhan, Andreas Theil, Mathias Uslar, and Roland Zoll. Machine-Readable Expert Knowledge Representation Concept. In *Proceedings of the 1st NFDI4Energy Conference 2024*. Zenodo, February 2024b. doi: 10.5281/zenodo.10655835. URL https://doi.org/10.5281/zenodo.10655835
- Arlena Wellßow, Torben Logemann, and Eric MSP Veith. Trajectory Generation Model: Building a Simulation Link Between Expert Knowledge and Offline Learning. In *Proceedings of the 14th International Conference on Simulation and Modeling Methodologies, Technologies and Applications - SIMULTECH*, pages 91–102. INSTICC, SciTePress, 2024a. ISBN 978-989-758-708-5. doi: 10.5220/0012764900003758
- Daniel Selvaratnam, Alessio Moreschini, Amritam Das, Thomas Parisini, and Henrik Sandberg. Fault Localisation in Infinite-Dimensional Linear Electrical Networks, 2025a. URL https://arxiv.org/abs/2504.04910. Submitted to IEEE journal
- Daniel Selvaratnam, Alessio Moreschini, Amritam Das, Thomas Parisini, and Henrik Sandberg. Frequency-Domain Bounds for the Multiconductor Telegrapher's Equation, 2025b. URL https://arxiv.org/abs/2504.01599. Submitted to IEEE journal

6.4 Stakeholder Workshops and Webinars

In total, three stakeholder workshops and webinars were organized. The first workshop was organized as a discussion and requirement workshop, where both academic and industry partners were invited. The second workshop was target at the specific topic of fault localization, where project external stakeholders were invited to discuss the feasibility of implementation in a real environment. The final workshop was organized as a public webinar that anybody could attend. Here, the main results of the project were presented.

6.4.1 Workshop on Resilience for Cyber-Physical Energy Systems

On May 10, 2023, the RESili8 project organized a workshop on resilience for cyber-physical energy systems. The workshop provided presentations on the recent results from the project but also the view from different stakeholders was included. A key-note presentation was given from Ellevio on their challenges when it comes to digitalization and how that affects resilience. Furthermore, a panel discussion including experts from KTH, TNO, and Ellevio gave very interesting insigths on what we can expect for resilience in future energy systems. The agenda for the workshop is seen in Figure 3a and a photo in Figure 3b. Furthermore, recordings and presentations can be found on the RESili8 website: www.resili8-project.eu.

Time	Subject
08:30 – 09:00	Registration and coffee
09:00 – 09:15	Welcome and Introduction *Filip Pröstl Andrén, AIT Austrian Institute of Technology*
09:15 – 09:45	Key Note: Resilience Challenges for System Operators *Stephan Stålered, Ellevio*
09:45 – 10:15	RESili8 Project Overview *Filip Pröstl Andrén, AIT Austrian Institute of Technology*
10:15 – 10:30	Coffee break
10:30 – 11:00	Technical Input: From Misuse-Case to Analysis Data: How to use a functional toolchain for expert-based AI analysis *Arlena Wellssow, OFFIS*
11:00 – 11:30	Technical Input: Sensor Data Consolidation and Verification *Victor Bagge, DLAB, and Henrik Sandberg, KTH*
11:30 – 12:15	Panel Discussion • *Lars Nordström, KTH* • *Ludwig Karg, B.A.U.M Consult GmbH* • *Frank Fransen, TNO* • *Stephan Stålered, Ellevio* *Chair: Francesca Soro, AIT Austrian Institute of Technology*
12:15 – 12:30	Recap and concluding remarks *Filip Pröstl Andrén, AIT Austrian Institute of Technology*
12:30 – 13:30	Optional lunch

(a)

(b)

Figure 3: RESili8 stakeholder workshop in Stockholm, Sweden: (a) Agenda of the workshop; (b) Initial talk by Filip Pröstl Andrén (AIT)

6.4.2 Workshop on Fault Localization

On May 22 - May 23, 2024, a workshop on fault localization was organized together with the Swedish DSO Östra Kinds Elkraft (ÖKE) in Lund, Sweden. The goal of the workshop was to discuss how new measurement solutions can help DSOs in localizing earth faults in their grids. ÖKE also offered to support activities within the RESili8 project by providing access to their grid in order to make measurements on fault injections. This was also followed up with a visit to grid of Östra Kinds Elkraft, where initial measurements were made. Figure 4 shows how the proof-of-concept measurements were made at the main substation of ÖKE.

6.4.3 Final Webinar

In this webinar the results from the RESili8 project were presented. The webinar was held on April 22, 2025. The goal with the webinar was to present the main outcomes of the project. It was an open webinar that anybody could attend. In total 34 registrations were received for the webinar and 32 participants attended the webinar. Four talks were given, as seen in Table 1. More information and recordings from the talks can be found on the RESili8 webpage: www.resili8-project.eu.

6.5 Conference Workshops and Webinars

6.5.1 Workshop on Resilience for Cyber-Physical Energy Systems @ ComForEn 2023

In March 2023, RESili8 organized a workshop on the ComForEn 2023 conference in Vienna, Austria (https://www.comforen.org/). During the workshop, RESili8's vision on how to tackle future resilience challenges with a solution package will be presented and discussed. The agenda consisted of an introduction to the RESili8 project, followed by three talks highlighting different aspects that are important for resilient cyber-physical energy systems. The following talks were given at the workshop:

- Overview of the RESili8 Project (AIT), see Figure 5.

Figure 4: Proof-of-concept measurements in the main substation of ÖKE.

Table 1: Agenda for the final stakeholder webinar on April 22, 2025.

Time	Subject
13:00 - 13:20	Conclusions from the RESili8 project *Filip Pröstl Andrén, AIT Austrian Institute of Technology*
13:20 - 13:50	AI-based resilience analysis: From Expert Knowledge to Test Case Generation *Arlena Wellßow, OFFIS*
13:50 - 14:20	Rapid development and validation of smart grid applications *Marco Mittelsdorf, Fraunhofer ISE*
14:20 - 14:50	Fault localization in heterogenous distribution grids *Henrik Sandberg, KTH*
14:50 - 15:00	Q&A

- Interoperability of Training Data for Adversarial Resilience Learning (OFFIS).
- Redundant Sensor Data Consolidation and Verification (DLAB, KTH).
- Training and validation using AIT's Cyber-Physical Range (AIT).

6.5.2 EPESec Workshop @ ARES 2023

RESili8 co-organized the 4th International Workshop on Electrical Power and Energy Systems Safety, Security and Resilience (EPESec 2023) held in conjunction with the 18th International Conference on Availability, Reliability and Security (ARES 2023). The workshop was aimed at collecting the most relevant ongoing research efforts in the digital security field for Electric Power and Energy Systems (EPES). It also served as a forum for relevant projects in order to disseminate their security-related results, boost cooperation, knowledge sharing and follow-up synergies, and foster the development of the EPES Security Community, composed of security experts and practitioners.

Figure 5: RESili8 workshop @ ComForEn 2023.

6.5.3 Online Training on the Digitalisation of Smart Energy Systems

On February 19 - 22, 2024, RESili8, together with the ERIGrid 2.0 and SINERGY projects, organized an online training series on digitalization of smart energy systems. The following trainings sessions were organized:

- Lecture 1, Monday, February 19, 2024, 14:00-16:00 CET, “Modelling and simulation of integrated energy systems”, E. Widl (AIT Austrian Institute of Technology)
- Lecture 2, Tuesday, February 20, 2024, 14:00-16:00 CET, “Integrated Energy Services, Cyber Security Issues, and Analytical Services”, V. Janev, V. Timcenko, S. Rakas, D. Jelic (Institute Mihajlo Pupin)
- Lecture 3, Monday, February 21, 2024, 14:00-16:00 CET, “Designing and Validating Cyber-Physical Energy Systems”, F. Pröstl Andrén, T. Strasser (AIT Austrian Institute of Technology)
- Lecture 4, Monday, February 22, 2024, 14:00-16:00 CET, “Cyber-Physical Tests Beds for Validation of Large-Scale Smart Grid Apps”, C. Gavriluta, D. Vettoretti (AIT Austrian Institute of Technology)

More information, together with the presentations can be found here:

- Edmund Widl, Valentina Janev, Valentina Timcenko, Slavica Bostjancic Rakas, Dea Jelic, Filip Pröstl Andrén, Thomas Strasser, Catalin Gavriluta, and Denis Vettoretti. Online Training Series on the Digitalisation of Smart Energy Systems , February 2024. URL https://doi.org/10.5281/zenodo.10676588

7 Conclusion

The RESili8 project has made significant strides in addressing the complex challenge of resilience in Cyber-Physical Energy Systems (CPES). Through a multidisciplinary approach that combines advanced AI techniques, sustainable system planning, and rigorous validation, the project has developed a comprehensive solution package aimed at enhancing the robustness and adaptability of modern energy infrastructures. These efforts are particularly timely and relevant as energy systems become increasingly digitalized and interconnected, requiring new paradigms of resilience that go beyond traditional engineering practices.

Dissemination has played a central role in the project's strategy to ensure that its innovations reach and benefit a wide range of stakeholders. The project's dissemination activities have been designed to engage both the scientific community and industry practitioners, as well as policy makers and the general public. This inclusive approach has helped to build a shared understanding of the challenges and opportunities associated with resilient energy systems.

The project's online presence, particularly through its dedicated website, has served as a vital platform for sharing updates, deliverables, and event information. Meanwhile, the organization of stakeholder workshops and webinars has provided valuable opportunities for dialogue, feedback, and knowledge exchange. These events have not only showcased the project's progress but also fostered meaningful interactions with external experts and end users, ensuring that the solutions developed are grounded in practical needs and realities.

Scientific dissemination has been equally robust, with numerous publications in high-impact journals and conferences. These contributions reflect the depth and quality of the research conducted within RESili8. The collaborative nature of these publications, often involving multiple consortium partners, underscores the strength of the interdisciplinary and cross-institutional cooperation that defines the project.

Looking ahead, the foundations laid by RESili8 in terms of both technical innovation and stakeholder engagement provide a strong basis for continued progress in the field. The dissemination activities documented in this report demonstrate the project's commitment to impact and legacy. As the energy sector continues to evolve, the insights and tools developed by RESili8 will remain valuable resources for researchers, practitioners, and policy makers alike.

In conclusion, the dissemination in RESili8 successfully supported the project's mission to advance resilient energy systems. By fostering awareness, dialogue, and collaboration, the project has ensured that its outcomes are not only scientifically sound but also socially and industrially relevant.

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Kin Cheong Sou and Henrik Sandberg. Resilient Scheduling of Control Software Updates in Power Distribution Systems. In *2022 IEEE 61st Conference on Decision and Control (CDC)*, pages 6146–6153, 2022. doi: 10.1109/CDC51059.2022.9993270.

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