

Panel

The top technical challenges for the next 10 years (my 3 top challenges)

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AMBER (Assessing Measuring, and Benchmarking Resilience)



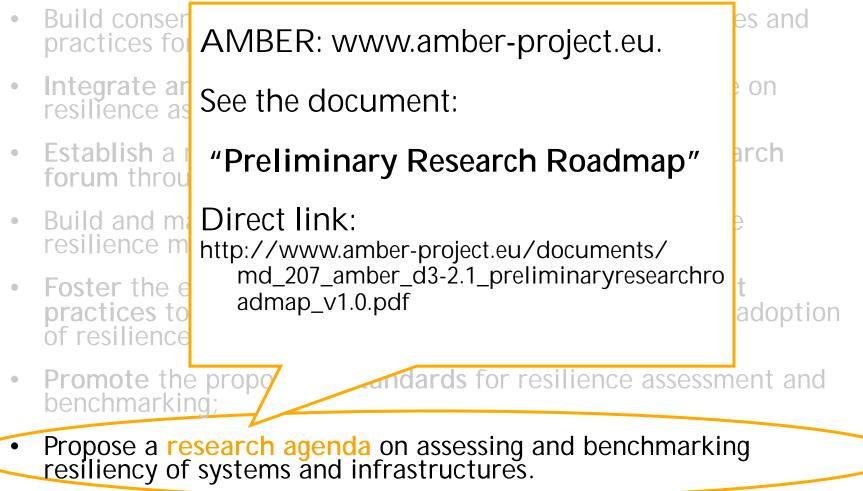
Objectives

- Build consensus on common understanding, methodologies and practices for resilience assessment;
- Integrate and coordinate European research and practice on resilience assessment;
- Establish a resilience assessment and benchmarking research forum through AMBER web portal;
- Build and maintain a data repository to analyze and share resilience measurement data.
- Foster the effective transfer of resilience assessment best practices to European industry, namely contribute to the adoption of resilience benchmarks by industry;
- Promote the proposal of standards for resilience assessment and benchmarking;
- Propose a research agenda on assessing and benchmarking resiliency of systems and infrastructures.

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Objectives



Challenge 1 Metrics, methods, and tools



- Boundaries of the system and abstraction
- What metrics? Just a small number? Specific of a given context?
- What to observe/monitor in the system?
- How to aggregate data collected in order to obtain measures? Blended methods.
- Relative measurements (for comparison, improvement, tuning)
- How to achieve this in a practical way (tools)?

Challenge 2 Validation

- Properties
 - Representativeness
 - Repeatability
 - Reproducibility
 - Portability
 - Scalability
 - ...
- Generalization
- Just being pragmatic is enough?



Challenge 3 Impact and relevance



- Why the research we are doing on dependability and security is not having the same impact on industry and society we see in other areas?
- How to select the challenges and research problems that will increase the impact of our research in the world?
 - Pay attention to the industry
 - Pay attention to the users' needs