

DeCAS

Demonstration of Coordinated Ancillary Services

DeCAS is a research project funded by the ERA-NET Smart Grids Plus initiative. Goal of the project is the research and analysis of a coordinated provision of ancillary services by distributed energy resources (DER) across voltage levels in the distribution grid. In addition to the grid-oriented perspective, also the market-oriented system integration of DER in form of market participation on the wholesale energy markets is included in the project. In this context, DeCAS focuses on the analysis of scalability and portability of existing concepts to the European level. Based on three national demonstrators in Germany, Austria and Finland (Innovation Cells – ICs), various market and regulatory frameworks are considered (cf. Figure 1).

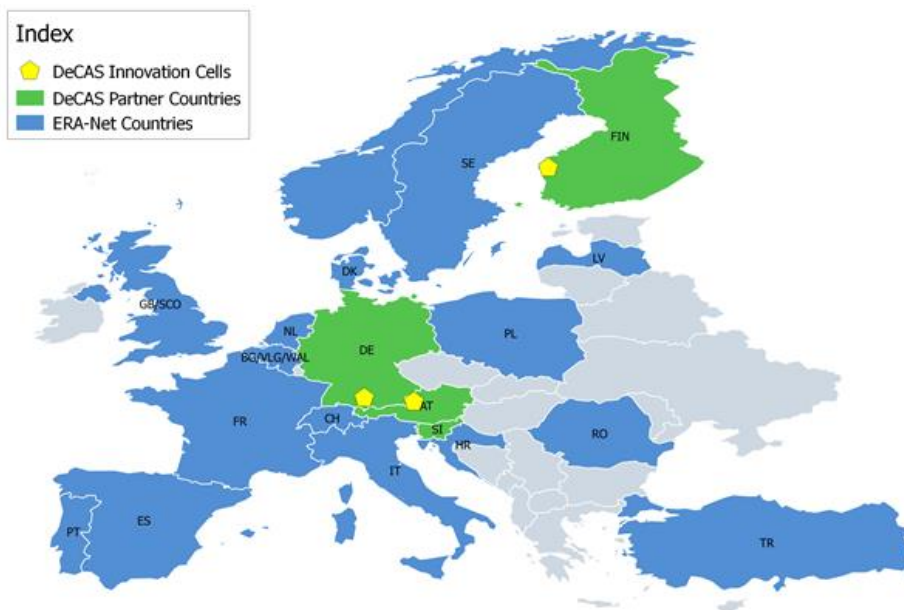


Figure 1: Overview of ERA-NET members, DeCAS partners and demonstrator projects

By implementing a DeCAS Experience Platform a close interaction and exchange between the different Innovation Cells is guaranteed. The experiences of the national demonstrator projects are used to analyze the large-scale application of the investigated concepts.

The Institute for High-Voltage Technology concentrates on the deduction of recommendations for market frameworks to enhance market integration of DER in the European energy markets. The IC Germany further develops a demonstrator of a local Virtual Power Plant, which was established in the research project IREN2. The Institute for High-Voltage Technology works on the implementation of an operational planning tool for Virtual Power Plants and the application in the project’s field test. The planning process will be expanded from the day-ahead to the intraday time horizon. For the deduction of recommendations for future market frameworks the IFHT also develops a software environment to analyze market integration of Virtual Power Plants under uncertainty. Aside from the German partners RWTH Aachen University, University of Kempten and Allgäu Netz the consortium consists of the European partners Siemens Austria, Austrian Institute for Technology (AIT), Salzburg Netz, ABB Finland and the University of Ljubljana.

Project information



Partners

- RWTH Aachen
- Hochschule Kempten
- Austrian Institute of Technology GmbH
- Salzburg Netz GmbH
- Siemens AG Österreich
- TU Vienna
- Allgäuer Überlandwerke
- ABB Finland
- University Ljubljana



Facts

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