

Workshop on DSM Potentials, Implementations and Experiences



Tuesday, 20th May 2014 – 10:00 - 17:30 Energie Steiermark / JOANNEUM RESEARCH Forschungsgesellschaft mbH, Leonhardstraße 59, 8010 Graz

The IEA DSM Task 17 and the European project EcoGrid EU jointly organise this workshop to foster the exchange between experts and stakeholders.

Attend the workshop to learn more about latest activities in the field of active demand response (DR) and demand side management (DSM). The IEA DSM Task 17: "Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages" and the European project "EcoGrid EU" jointly organise this workshop to foster the exchange between experts and stakeholders. The contributions are structured into four blocks which will cover "DMS potentials of buildings", "DSM for distribution networks", "DSM and market operation", "DSM and electric vehicles" and a panel discussion with the presenters.



The objective of the EcoGrid EU project is to develop a prototype of a European Smart Grid market platform able to incorporate small-scale distributed energy resources as well as flexible demand into the existing power system markets, balancing tools and operation procedures. The key idea of the project is to introduce a real time market (close to operation) distributing a real time price on which distributed energy resources and flexible demand can react.



IEA-DSM Task 17 will address the current role and potential of flexibility in electricity demand and supply of systems of energy consuming/producing processes in buildings equipped with DER (electric vehicles, photovoltaic, storage, heat pumps) and their impacts on the grid and markets.



The Project eBADGE is an EU-funded project that proposes an optimal pan-European intelligent Balancing mechanism, piloted on the borders of Austria, Italy and Slovenia, able to integrate VPP systems by means of an integrated communication infrastructure that can assist in the management of the electricity Transmission and Distribution grids in an optimized, controlled and secure manner.



10:00 Welcome and opening words

Introduction to EcoGrid and IEA DSM Task 17 - Benoît Bletterie, Matthias Stifter

10:10 DSM potentials of buildings

Potentials of households, buildings and commercials

- 10:10 Buildings as interactive participants in Smart Grids: a demonstration project for DSM -Georg Siegel (AIT, Austria)
- 10:30 Load flexibility in small and medium enterprises and criteria for successfully enabling them – *Michael Wedler* (B.A.U.M. Consult, Germany)

10:50 Load shifting in homes, industry and communities – Michael Schmidthaler (JKU, Austria)

11:10 What can the industry provide to enable DSM in buildings – Werner Ziel (SIEMENS, Germany)

11:30 Coffee Break

12:00 DSM for distribution networks

DSM for integration of renewables and supporting network operation

12:00	Current status, issues and potentials in India, Suryanarayana Doolla (IIT India)
12:20	PowerMatching City II, Demonstration of multi-objective optimization in a living lab – René
	Kamphuis (TNO, Netherlands)
12:40	A Swiss perspective of DSM for electricity networks – Overview of ongoing projects –
	Matthias Gallus (BFE, Switzerland)

13:00 Lunch

14:00 DSM for market participation

Participation and interaction with electricity markets

14:00	Quantifying the demand shift on the basis of statistical methods – first evaluation from the
	project EcoGrid EU – <i>Florian Judex</i> (AIT, Austria)
14.20	Analysis of the European Framework for Balancing Power - opportunities and new trends

14:20 Analysis of the European Framework for Balancing Power - opportunities and new trends identified within the EcoGrid EU project – Giannopoulos Georgios (ELIA, Belgium)

14:40 Smart Grids and Energy Markets – Jan Segerstam (Empower, Finland)

15:00 **eBADGE - Integrating the European electricity market** – *Alexander Lurf* (Cybergrid, Austria)

15:30 Coffee Break

16:00 DSM for market participation (continued) / DSM and Electric Vehicles

16:00 Residential real-time pricing experience – Steve Widergren (PNNL, USA)

Electric Vehicles as a resource for demand response

16:20 Smart Grids Model Region Salzburg: Implementation and experiences of controlled e-car charging – *Markus Radauer* (Salzburg Netz, Austria)

16:40 Active DSM by forecasting – Christoph Maier (TU-Wien ESEA, Austria)

17:00 Round Table Discussion

Discussion with the presenters

17:30 End