



SEESGEN-ICT

4° GENERAL WORKSHOP

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Jussi Ikäheimo (VTT):
WP5 introduction, scope, priorities



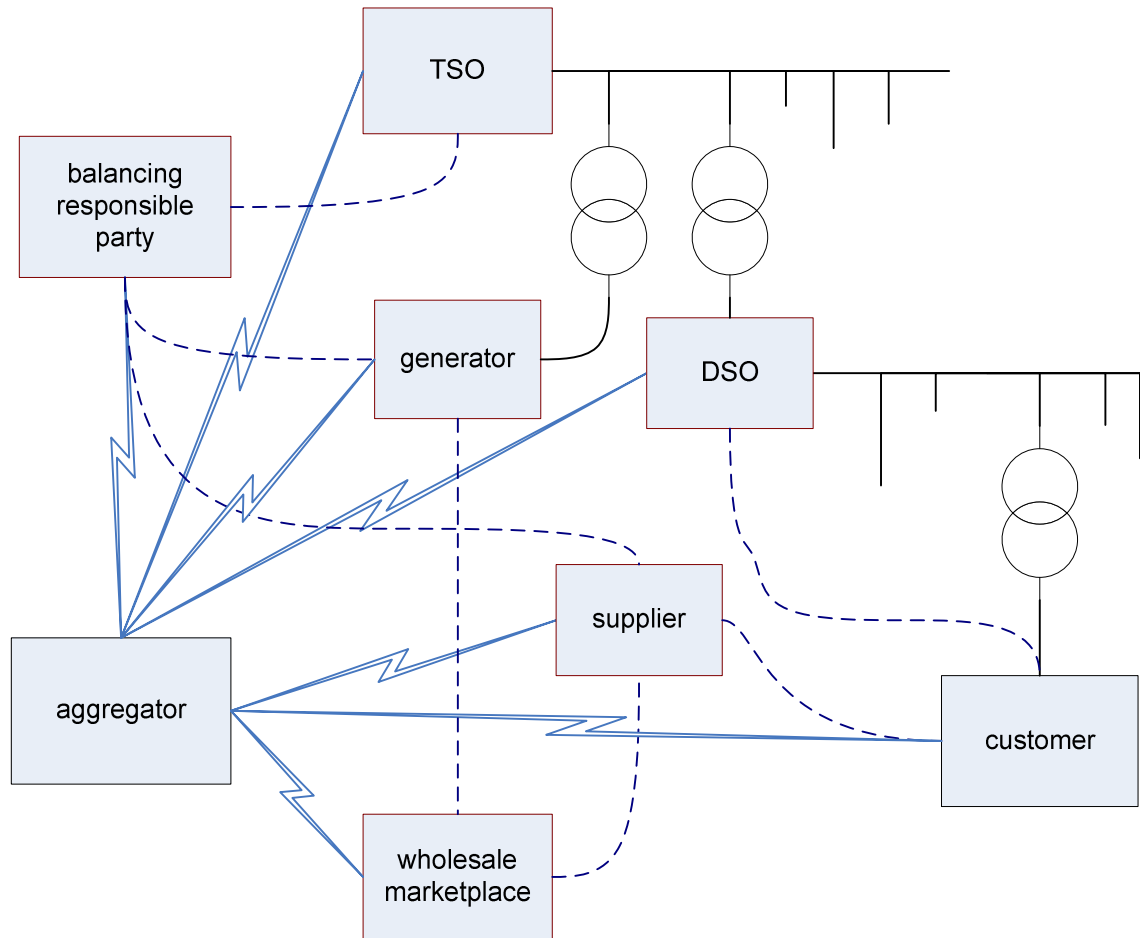


Objectives

- Work Package 5 aims at
 - exploring requirements and barriers to the deployment of business models needed to support implementation of EE and DER in smart grids in a competitive market;
 - analysing what kind of ICT solutions and methods are already available to support these business models and what kind of research/developments are still required.

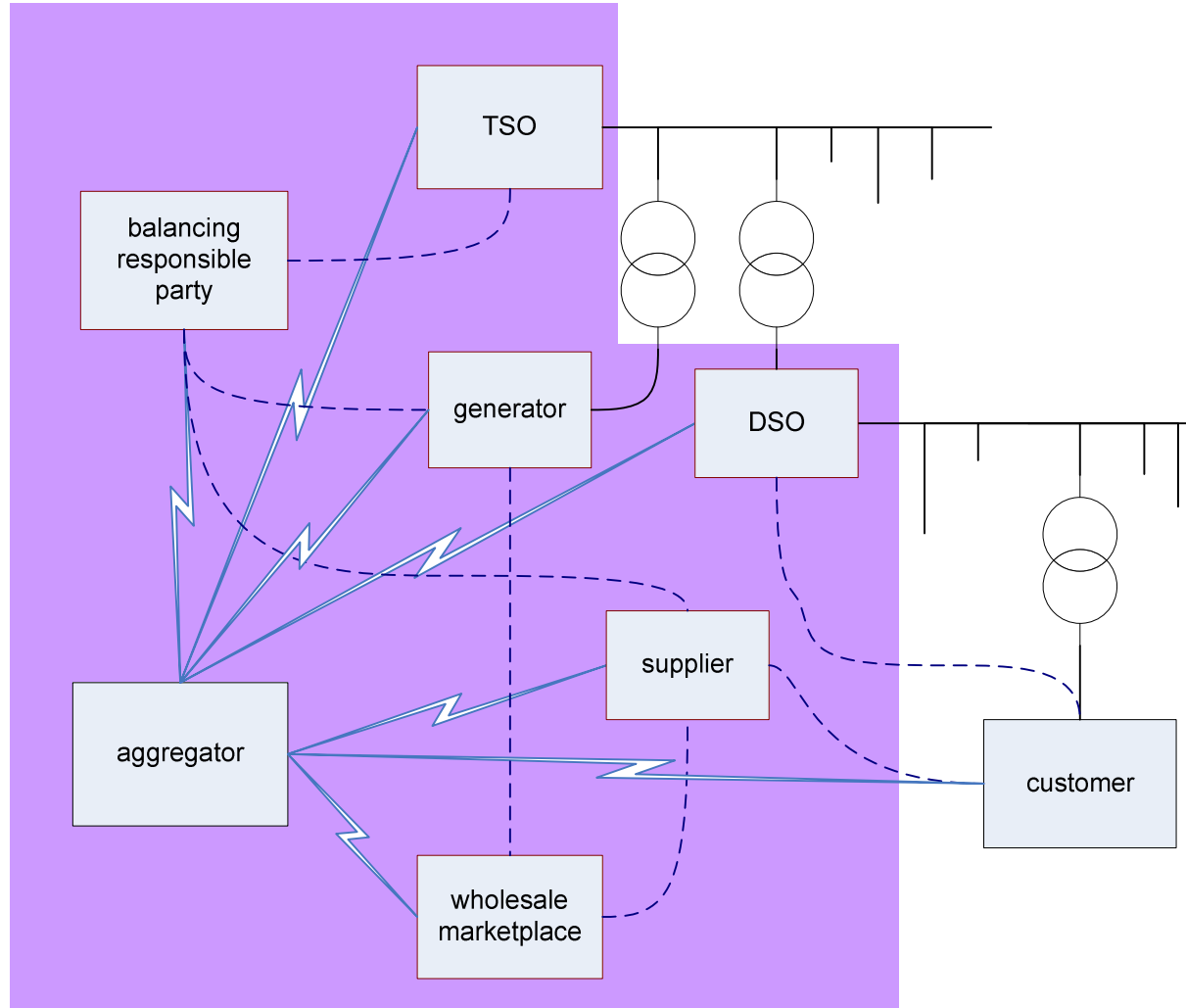


Our focus is the DER aggregator



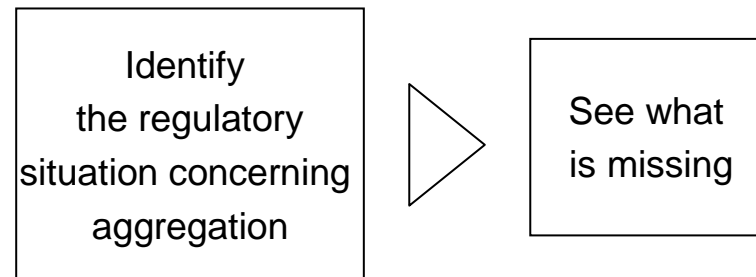
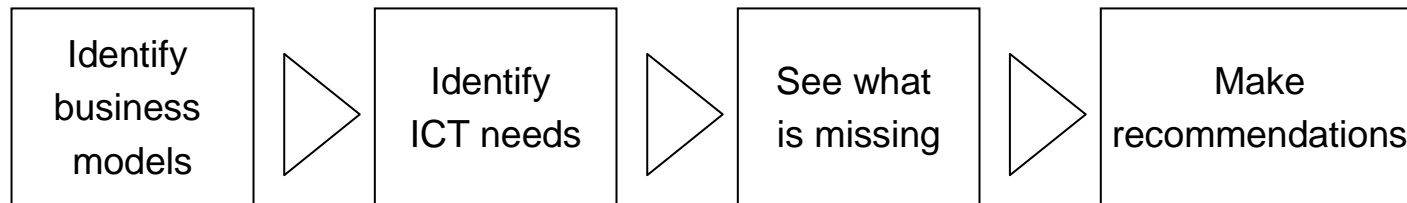


Wp5 Scope





Process of working





Identified business models

- Structured description of nine different aggregator business models:
 - EU-DEEP task forces 1–3
 - two models extracted from FENIX
 - Norwegian PLUG model of an aggregator trading power produced by ships
 - Norwegian DR aggregator model
 - Italian "ritiro dedicato" models where GSE sells energy produced by DG
 - Italian "scambio sul posto" model, where an aggregator allows DER owners to use the grid as a storage
 - Polish CHP aggregator model
- Done based on a template question list, covering aspects such as stakeholders involved, their roles, energy flows, message exchanges, ICT needed, etc.



ICT needed in aggregator business models

- The focus of ICT tools will be on higher-level software tools, i.e. the smart ICT, which will be necessary for implementing the business models.
- Individual tools:
 - Optimization / scheduling
 - Load forecasting
 - Price forecasting
 - Generation forecasting
- Market communication
- Information security
- Interoperability (both between aggregator tools and with other actors)



Linking technology to business models (example)

<i>Technology Type</i>	<i>Description of functionality</i>	<i>Role by which it is used</i>	<i>IPR-holders</i>	<i>Maturity level</i>
<i>DER controller</i>	It is both software and hardware. It: <ul style="list-style-type: none"> - It allows the DER to send a power request signal. - It collects measurements 	DER	Honeywell	Commercial tool
<i>Aggregation server</i>	Implements schedule and energy optimisation	Aggregator	Siemens	Commercial tool
			Siemens	Demonstrating tool based on commercial one



Contributors and sources

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