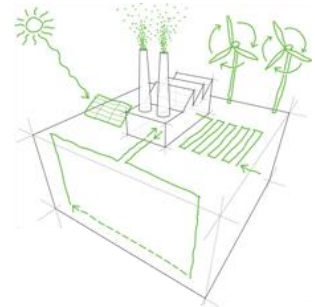


SmartC2Net Project Newsletter



SMARTC²NET

Smart Control of Energy Distribution Grids over Heterogeneous Communication Networks

Newsletter 1

Concept & Objectives

The **SmartC2Net** project will develop, implement and validate robust solutions that enable Smart Grid operation on top of heterogeneous off-the-shelf communication infrastructures with varying properties.

The **SmartC2Net** will

- Provide a reliable energy infrastructure at low infrastructure costs
- Position the capabilities of telecommunication operators and energy system integrators in the Smart Grid value chain creating benefits for all stake-holders
- Strengthen European research and industrial innovation in the area of Smart Grids via the combination of different research fields

Approach & Outcome

- Design Smart Grid control applications that
 - are aware of communication network behaviour and its impact on input information quality and actuator reactivity
 - react to changes of information and network quality ensuring that control actions are executed reliably in a wide range of operation conditions
- Dynamically change network configurations (including QoS settings), information access procedures, and interaction protocols with grid actuators in order to improve robustness of smart grid control
- Investigate protective measures to increase robustness to maliciously created information and to protect against attacks with adaptive solutions
- Integrate the designed mechanisms into use-cases, showing their effectiveness in the active management of DER connected to distribution grids”
- Adaptive Monitoring: both of Communication Network and Energy Grid
- Adaptive Communication: containing Information access management and actuator access management as well as Network configuration control enabling the communication network to react on changes in both domains automatically
- Adaptive Grid Control

Project Deliverables

The public deliverables of the first ten months of the **SmartC2Net** Project are available on the website (<http://www.smartc2net.eu/public-deliverables>).

They introduce the four **SmartC2Net** Use cases (<http://www.smartc2net.eu/use-cases-1>) and map them to an architecture for robust, adaptive control utilizing communication network monitoring and QoS adaptation.

Publications

Two journal articles and one conference publication are accessible here (<http://www.smartc2net.eu/publications>).

The **SmartC2Net** consortium is preparing publications for CIRED 2014 (<http://www.cired2014-workshop.org/>), EnergyCon 2014 (<http://www.energycon2014.org>), and IEEE SmartGridCom 2014 (<http://sgc2014.ieee-smartgridcomm.org/>).

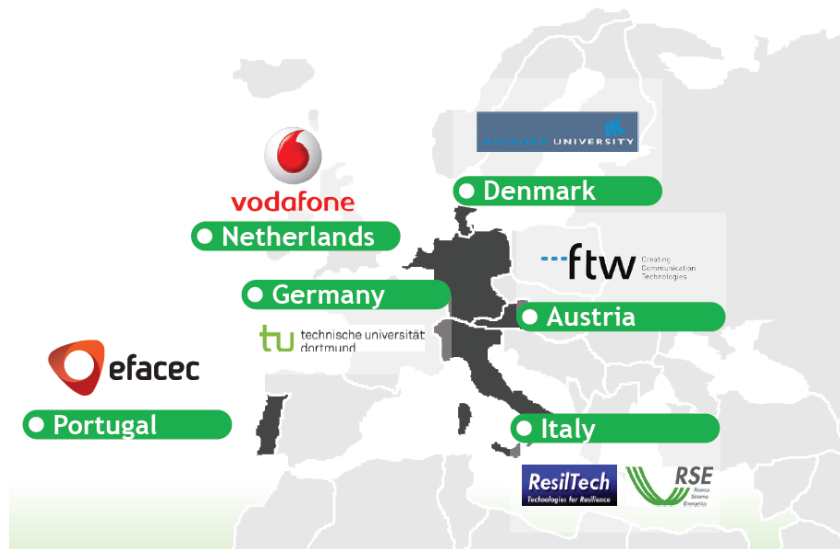
Project Collaborations and joint workshops

SmartC2Net is preparing a collaborative workshop with the EDGE project (<http://kom.aau.dk/project/edge/>) and with the FP7 projects Sunseed and Intrepid (<http://www.fp7-intrepid.eu/>) at the Golbale Wirless Summit (<http://gws2014.org/>) in Aalborg.

An overview of the **SmartC2Net** project has been presented at the Technical Committee meeting of the GRID4EU project (<http://www.grid4eu.eu>) and the proposal of collaboration between the two projects has been accepted.

SmartC2Net is in the process of organizing a joint workshop on communication and robust control in future energy distribution grids (*working title*) at and IEEE SmartGridCom 2014 (<http://sgc2014.ieee-smartgridcomm.org/>). Please contact Nuno Silva (nuno.silva@efacec.com) if you are interested to contribute.

Project Partners



Visit us and learn more: <http://smartc2net.eu>

