R&D PROJECT





022 Commissariat a l'energie atomique et aux energies alternatives



Cassidian Cybersecurity SAS









DURATION

December 2017-November 2020

BUDGET

Consortium budget

3.955.258.75 €

COMSA Budget

376.500€

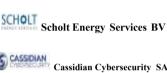
COMSA Funding

376.500€

COORDINATOR

Commissariat a l'energie atomique et aux energies alternatives

CALL / TOPIC

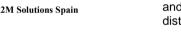












Project Title

Demand Response Integration tEchnologies: unlocking the demand response potential in the distribution grid Acronym DRIVE

PROJECT CONTENT

State-of-the-art

It is widely recognised that increasing flexibility is key for the reliable operation of future power systems with very high penetration levels of Variable Renewable Energy Sources (VRES). The most significant source of flexibility in a future scenario with high penetration of VRES is Demand Response (DR). DR provides an opportunity for consumers to play a significant role in the operation of the electric grid by reducing or shifting their electricity usage in response to timebased rated or other forms or financial incentives. DR programs are being used by some electric system planners and operators, using mainly the flexibility provided by industrial buildings connected to HV grid, as a resource options for balancing supply and demand.

General objectives

DRIvE project aims to unlock the potential of residential and tertiary buildings in the distribution grid through a full-fledged platform bridging seamlessly the valuechain from planning and design of assets/buildings towards optimal operations in the next generation SmartGrids, paving the way to a fully deployed DR market in the distribution network.

DRIvE will develop a fully-integrated ICT infrastructure consisting of interoperable DR-enabling Energy Management solutions for residential and tertiary buildings and a platform for effective and secure management of flexibility at the level of the distribution grid. This platform will be validated at COMSA's head office.

Project tasks

- Project management I.
- Specification, Requirements and ICT infrastructure design II.
- III. Drive DR enabling technologies for residential and tertiary buildings
- IV. ICT Platform for demand response district management
- Development of data security mechanisms for Smart Grids V.
- VI. Systems integration
- VII. Demostration and validation
- VIII. Results dissemination and exploitation
- IX. Ethics requirements

Project conclusions

The project has just started, no conclusions have been obtained yet.







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