

DÉBAT PUBLIC
PROGRAMMATION
PLURIANNUELLE
DE L'ÉNERGIE
DU 19 MARS AU 30 JUIN 2018



Putting Residential Flexibility
Management into Action with
Pilot sites in Europe: Feedback
from MAS2TERING, BEEST and
DRIvE European projects

A public debate about the multi-year energy program in Europe.



DRIVE links together cutting-edge science in artificial intelligence, forecasting and cyber security with emerging innovative SMEs making first market penetration in EU DR markets. In doing so, near market solutions are strengthened with innovative functionalities that support a vision of an "internet of energy" and "collaborative energy network." DRIVE uses artificial intelligence to bring decentralized management and DR services to prosumers, grid stakeholders and distribution system operators.

2017-2020 / H2020 #774431 Website: https://www.h2020-drive.eu

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MAS2TERING: Multi-Agent Systems and Secured coupling of Telecom and Energy gRIds for Next Generation smartgrid services



The main goal of Mas2tering was to develop an automatic system that enables to adapt the residential consumption to the local production. Domestic final users will be progressively equipped with technologies able to provide flexibility: programmable smart appliances, local storage systems and local generation systems (photovoltaic panels, wind turbines). The Mas2tering software platform uses this flexibility to perform a multi-level optimization of electric grid management from the user level to the district level, by way of a local community of prosumers.

2014-2017 / FP7 #619682 Website: http://www.mas2tering.eu

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BEEST: Building Energy Efficiency Management & Smart Grid Integration Tools



The main objective of BEEST was to develop a suite of applications ("apps") aiming at reducing the energy costs in tertiary buildings by reducing energy consumption on the one hand and unit cost of kWh on the other hand. The BEEST suite of apps addresses the optimization of exploitation practices in 3 different dimensions: In the Facility Management dimension, energy consumption is minimized by automatically optimizing working parameters in the Heating, Ventilation and Air Conditioning System through the existing Building Management Software.

WORKSHOP AGENDA

The objective of the workshop is twofold:

- 1. To present the objectives, technologies and results of Mas2tering, BEEST and DRIvE projects
- 2. To generate a public debate with discussions of experts on the energy program plan in Europe for the next years to come and beyond. The workshop is organized by DRIvE project and it will count with the following presentations:
 - "Mas2tering: Multi-Agent Systems and Secured coupling of Telecom and Energy grids for next generation smartgrid services", Marie-France Robbe (CEA)
 - "BEEST: Building Energy Efficiency Management & Smart Grid Integration Tools", Stefan Lodeweyckx (ENERVALIS)
 - "DRIvE: Unlocking the Demand Response potential in the distribution grid", Stefan Lodeweyck (ENERVALIS)
 - "Business Model Opportunities for local flexibility aggregation", Juan Manuel Espeche (R2M)
 - "Streaming Data-based Forecasting for Demand Response: From Mas2tering to DRIvE", Monjur Mourshed (Cardiff University)
 - "Multi-agent system optimisation for local energy communities: from Mas2tering to DRIvE", Meritxell Vinyals (CEA)
 - "Authentication, Authorization & Accounting: from Multi-Agent System to grid security", Paul-Emmanuel Brun (AIRBUS)
 - "Regulatory Frameworks Affecting Demand Response Solutions", Sergio Valentino Costa (COMSA)
 - "Real-time Controller Hardware in the Loop (CHIL) as the key enabling technology for next generation Fast DR", Nikola Stojkov (TYPHOON HIL)

The workshop will be an activity within the Conference Sustainable Places 2018, and it will take place on June 28th, 2018, from 14:00 until 15:30. The workshop has received the CNDP label as an activity of the Multi-Annual Public Debate on Energy.