



**"The MAS<sup>2</sup>TERING project (FP7) kicks off at CEA in Paris on September 4<sup>th</sup>, 2014."**

The EU reached an important milestone along the roadmap to a low-carbon economy by 2050 on September 4<sup>th</sup>, 2014 with the launch of the MAS<sup>2</sup>TERING project. MAS<sup>2</sup>TERING stands for "**Multi-Agent Systems and Secured coupling of Telecom and Energy gRids for Next Generation smart grid services**," and is a collaborative three-year technology driven and business focused study that aims to facilitate the optimisation of European smart grids to include a better integration of renewable energy technologies. Through this, the project will contribute to the realization of a low carbon electricity grid that minimises greenhouse gas emissions and enhances the security, quality, and reliability of energy supply networks.

MAS<sup>2</sup>TERING addresses the need for the development of an innovative information and communication technology (ICT) platform for the monitoring and optimal management of low-voltage distribution grids by and will be focused on enhanced security measures. The project consortium includes prominent industrial organizations and research institutes from the European energy, telecom, ICT, and security fields, to leverage the critical dimensions of the project whilst ensuring the potential for market uptake.

One primary motivation for the project is to foster new collaborative services and business models between utilities, telecoms and DSOs (distribution system operators) over the last mile connectivity to the home. At present, utilities and DSOs are concerned with everything that leads up to the home. At present, telecoms have better visibility on everything that is happening inside the home. Through data exchange, optimization and new services are possible.

The project is timely as EU Member States have committed to the future deployment of 200 million smart meters for electricity and 45 million smart meters for gas by 2020 for a total potential investment of €45 billion. By 2020, it is expected that almost 72% of European consumers will have a smart meter for electricity while 40% will have one for gas. Renewable energy technology installations and smart appliances within the home are becoming prevalent and an important part of the electrical grid.

With 450 million energy consumers in the EU and demand rising 1-2% per year, there is a need to utilise the data that is available to enable optimisation of demand management and promote better coordination and communication between electricity producers, distributors, and consumers. Currently, annual transmission and distribution losses average 6% in the EU representing 7 billion Euros in energy wasted every year during distribution, which highlights the requirement for this improvement in efficiency.

MAS<sup>2</sup>TERING brings together a diverse group of experts for thought-leadership engagement workshops with the first being hosted by Telecom Italia on 17 October in Venice in collaboration with the Energy@Home alliance and the ZigBee Alliance. An additional project highlight are the three industrial use cases where careful field-testing and software development related to low-voltage renewable energy production, distribution, storage, consumption control, and metering will be validated. After the project, the results and outcomes will be utilized within research and

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MAS<sup>2</sup>TERING is a Collaborative Project (CP) within the 7th Framework Programme of the European Commission. More info can be found at: <http://www.mas2tering.eu/>



commercial activities of the consortium partners (CEA, Utility Partnership Limited, R2M Solution, GDF Suez, Cassidian CyberSecurity, Telecom Italia, Cardiff University, Waterford Institute of Technology and Laborelec; from five European countries: France, United Kingdom, Italy, Ireland, and Belgium).

Capturing the spirit and motivation of the project, the project coordinator Sylvain Robert of CEA Tech said:

*“Success depends on how smart infrastructures, combining energy and telecom, are developed and implemented for the wider integration of security-aware distributed energy resources into the increasingly decentralized grid.”*



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